

THE RAILWAY GAZETTE

A Journal of Management, Engineering and Operation
INCORPORATING

Railway Engineer • TRANSPORT • The Railway News

The Railway Times • Herapath's Railway Journal • RAILWAY RECORD.

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DISPATCH OF "THE RAILWAY GAZETTE" OVERSEAS

We would remind our readers that there are many overseas countries to which it is not permissible for private individuals to send printed journals and newspapers. THE RAILWAY GAZETTE possesses the necessary permit and machinery for such dispatch, and any reader desirous of arranging for copies to be delivered to an agent or correspondent overseas should place the order with us together with the necessary delivery instructions.

We would emphasise that copies addressed to places in Great Britain should not be re-directed to places overseas, as they are stopped under the provisions of Statutory Rules & Orders 1939, No. 1440

TO CALLERS AND TELEPHONERS

Consequent on the war and the blackout regulations, as an emergency measure to assist our staff in getting home before it is fully dark, our office hours (without a lunch interval) until Saturday, February 10, are:—

Mondays to Fridays - 9 a.m. till 3.15 p.m.

Saturdays - 9 a.m. till 1 p.m.

With the object of conserving paper by avoiding the return of unsold copies, readers are advised in the interests of all concerned to place a regular order for THE RAILWAY GAZETTE either with their newsagent or direct with the Publisher

Franco-British Unity

COMPLETE unity of interest between Britain and France and the pooling not only of raw materials but of the manufacturing resources of the two countries to an extent in which it was possible to envisage machine tools passing to and fro across the Channel according to the needs of the times were stressed in a joint press interview given by Mr. Leslie Burgin and M. Raoul Dautry. The French Minister of Armament, like his British counterpart the Minister of Supply, is a vigorous personality and left no doubt of his determination to press the economic collaboration of the two countries to the uttermost. M. Dautry is no stranger to readers of THE RAILWAY GAZETTE. His business career has been closely associated with the railways of France ever since he joined the Nord in 1903. From November, 1928, until the middle of 1937 he was General Manager of the C. de f. de l'Etat; during that period the system made great technical progress which was the subject of a special description in THE RAILWAY GAZETTE of January 6, 1933. He developed among the men a social sense and a spirit of co-operation which have proved of great value, while he was responsible for the modernisation of the plant and for the increase in yield of the railway. His administrative gifts and knowledge of men and machines assure his success in the arduous task he has undertaken.

* * * *

State Purchases and the Export Trade

Britain's stocks of raw materials and essential commodities at the outbreak of the present war were infinitely greater than in 1914. Further, by reason of the active steps which the Government took in the early months of last year to prepare against the possibility of conflict, both this country and France have been assured of renewals of supplies at a reasonable level of prices; this has been achieved by such measures as the purchase of the whole of the Australian and New Zealand wool clip for the duration of the war and the year after. Mr. J. J. Llewellyn, Parliamentary Secretary to the Ministry of Supply, in a recent review of the activities of the Ministry, was able to show that the precautions which the Government had taken in this respect were now standing the Allies in good stead. How great a factor State purchases have become in the industrial life of the country may be gauged from the fact that the Ministry now handles direct contracts for raw materials valued at some £150,000,000 a year. Mr. Llewellyn rightly stressed the importance of ensuring that our export industries secure their share of the commodities they need to pursue a trade which is a vital part of the national effort.

* * * *

Road Accidents and the Blackout

The Ministry of Transport return of the numbers of persons in Great Britain who lost their lives in the month of December, 1939, as a result of road accidents, shows a total of 1,155, the largest yet recorded, exceeding even the figure of 1,130 for September. In the four months since the war the total fatalities were 4,130, an increase of 1,939 or 88.5 per cent. over those for the corresponding months of 1938. Adult pedestrians suffered the most, with 2,363 fatalities during the last four months of 1939, which were higher by 1,415 or 149.26 per cent. than those for the corresponding period of 1938. Motor cyclist fatalities in the four months numbered 448, an increase of 113 or 33.73 per cent. in comparison with September to December inclusive in 1938. Of the December, 1939, fatalities 895 took place during the blackout and 260 "during other hours." Adult pedestrian fatalities in December, 1939, were 675 during the blackout and 71

during other hours, and the deaths of motor cyclists were 50 during the blackout and 33 at other times. Attached to the return for December, 1939, is a table showing that for the whole year 1939 the total fatalities in Great Britain from road accidents were 8,270, against 6,599 in 1938, i.e., deaths occurring during the respective periods as the result of road accidents, irrespective of the date of the accident. Adult pedestrian fatalities in 1939 were 3,644, against 2,164 in 1938, motor cyclist fatalities 1,064 against 972, and adult pedal cyclist fatalities 1,190 against 1,185, but juvenile pedestrian fatalities declined from 864 to 849, and juvenile pedal cyclist fatalities from 205 to 184.

* * * *

Overseas Railway Traffics

The Buenos Ayres Great Southern and the Buenos Ayres Western Railways continue their improvement in traffic receipts, and in the 28th and 29th weeks of the current financial year the Great Southern has reduced its previous decrease by 223,000 pesos and the Western has added 134,000 pesos to its former increase. By way of contrast the drop in Central Argentine takings for the same period is no less than 1,236,600 pesos. For the corresponding weeks in 1939 this company had an increase of about 389,000 pesos. Antofagasta traffics for the first two weeks of 1940 show an improvement of £12,030, or 52.49 per cent.

	No. of Week	Weekly Traffics	Inc. or Decrease	Aggregate Traffic	Inc. or Decrease
Buenos Ayres & Pacific*	29th	1,340	—	34,713	— 498
Buenos Ayres Great Southern*	29th	2,904	+	59,182	— 574
Buenos Ayres Western*	29th	912	+	20,848	+ 1,558
Central Argentine*	29th	1,500	—	50,998	— 1,008

Canadian Pacific	2nd	£27,400	+	£102,200	1,014,200	+	£163,800
Bombay, Baroda & Central India	41st	264,675	—	600	6,888,125	+	120,975

* Traffic figures in thousands of pesos.

Central Uruguay traffics in the 28th and 29th weeks have improved by £15,553, and show also an increase in currency figures.

* * * *

Bengal & North Western Railway

A decrease of Rs. 11,49,195 in gross earnings, an increase of Rs. 5,61,918 in working expenses, and a decrease of Rs. 17,11,113 in net earnings are shown for the year ended September 30, 1939, on the 1,305 miles of metre-gauge line of this company and on the 779 miles of the Tirhut State Railway which it works. In passenger traffic there were decreases in all classes except "intermediate," and the falling-off under general merchandise was primarily due to reduced sugar traffic on account of a short cane season. Renewal of covered goods wagons, higher cost of coal, and additional traffic staff to comply with the hours of employment regulations were the main causes of the advance in working expenses.

	1937-38	1938-39
Mean mileage	2,112	2,104
Passengers	32,208,406	31,428,481
General merchandise, tons	4,246,031	3,883,479
Train-miles	9,803,781	9,688,157
Operating ratio, per cent.	47.15	50.19
	Rs.	Rs.
Coaching receipts	1,53,76,088	1,53,98,820
Goods traffic receipts	2,09,49,641	1,98,08,558
Total earnings	3,75,10,786	3,63,61,591
Working expenses	1,76,86,744	1,82,48,662
Net earnings	1,98,24,042	1,81,12,929

The company's share of net earnings was Rs. 1,00,39,237, realising, less loss on remittances, £749,557, compared with Rs. 1,14,25,962 and £856,674 for 1937-38. Stockholders receive a total distribution of 16 per cent., against 18 per cent.

Midland Railway of Western Australia

One of the few important privately-owned railways now existing on the Australian Continent is that belonging to the Midland Railway Co. of Western Australia Ltd., which connects the Northern system of the Western Australian Government Railways with Perth and with the Eastern Goldfields Railway of the State. The company operating the line has a concession, which includes a land grant, from the Western Australian Government. A most important and fertile part of the State is served by the railway, which has a length of 277 miles on the 3 ft. 6 in. gauge, running from Midland Junction near Perth, to Geraldton. It was opened for traffic in 1894, but for many years was not a financial success. A maiden dividend of 2½ per cent. was paid on the unified ordinary stock for the year ended June 30, 1927, followed by dividends of 3 per cent. for 1927-28, 4 per cent. for 1928-29, and 3 per cent. for 1929-30. Thereafter no dividends were paid until the 2½ per cent. distribution made for the year ended June 30, 1938. The report for the year to June 30 last shows gross traffic receipts of £174,422, a decrease of £5,191, an advance in working expenses from £80,670 to £82,821, and net receipts £7,342 lower at £91,601. After providing £35,000 for depreciation, and making other appropriations, full debenture interest is met, leaving £42,586 to be carried forward, against £29,491 brought in. No ordinary dividend is recommended, although over 2 per cent. was fully earned.

* * * *

Stones on the Line

It is satisfactory to learn that no railway servant has been found in the least degree to blame for the unfortunate derailment at Saltcoats, L.M.S.R., on August 5 last, rendered all the worse by the presence of an embankment down which the engine plunged, dragging three coaches after it, and involving four deaths. But for this the accident might have had little harmful result, for the train was certainly travelling at a very moderate rate, in accordance with the speed restriction at the spot. Driver and fireman lost their lives, and evidence as to the behaviour of the train on leaving the track was provided partly by outsiders. It was not, in any case, of great use save as a confirmation of general facts, for Colonel Trench was soon convinced that the primary cause of the accident was the mischievous placing of stones on the line. A brief summary of his report will be found on page 131. Such an accident is fortunately of very rare occurrence, and as there is no practical suggestion to make for its avoidance, the report contains no recommendation. There is just the hope, as Colonel Trench says, that the accident may serve to some extent to deter others from trying to see what putting stones on the line will do, but the average small boy can hardly be expected to view the matter in all its seriousness.

* * * *

Hill Climbing with Steam

Few countries offer such forbidding *terrain* for railway operation as Norway, and the more so as the relatively sparse traffic over the two longest of the principal main lines of the country—Bergen—Oslo and Bergen—Trondheim—has so far not warranted the capital cost of electrification as a solution of the problem of operating over extremely long and steep gradients. The nature of these gradients may be judged from the fact that on the journey eastwards from Bergen to Oslo an ascent of 4,115 ft. is concentrated in the 45 miles between Voss and Kirnd, the summit between Myrdal and Finse; continuous gradients of 1 in 46½ and curves of 12½-ch. radius abound. On

the Trondheim main line gradients of 1 in 55½ and curves of 15 ch. radius lead to the summit at Hjerkin, 3,362 ft. above the sea. Matters are complicated by the restriction of axle-loads to 15½ tons, made necessary by the general use of 70 lb. rails. The work done by steam locomotives over these routes, as described on page 132 of this issue, is in the circumstances remarkable. Multi-cylinder simple propulsion has been abandoned in favour of compound working, with considerable advantage, and the article gives examples of a 79-ton 4-cylinder compound 4-8-0 maintaining 27-28 m.p.h. up 1 in 46½ grades, two 64-ton 4-6-0s taking a 300-ton train up 1 in 55 inclinations at 33 m.p.h., and one of the new 98½-ton 2-8-4 "Dovre-gubben" locomotives handling a 345-ton load up a continuous 1 in 55 grade at 37 m.p.h.

* * * *

Heat Engineering Research

Man always finds more pleasure in reviewing the romantic past or trying to visualise a marvellous future than he does in contemplating the mundane present, and during dreary months of war to come this particular form of escapism will probably be in greater evidence than ever. In an address delivered recently at Glasgow, Mr. E. Bruce Ball, President of the Institution of Mechanical Engineers, referred to the possibilities of scientific development during the next 25 years, and foresaw, among other things, the more general use of infra red ray lamps which give more accurate control in the direction and efficient utilisation of heat than ordinary fires or stoves. The energy from such lamps is of the radiant variety and it will pass like the rays of the sun through wide intervening spaces and even through certain solid or liquid bodies without becoming dissipated on the way. Also it can be focussed. In illustration of these facts it is suggested that an egg could be boiled inside a flask of water perched on a cake of ice. One technical institute has recently been endowed with £120,000 for investigating the possibility of utilising solar energy, and this conjures up other visions. It is said that in a single cloudless midsummer day the sun pours down on a good-sized roof as much electrical energy as the average family now uses in a year.

* * * *

A Wrong-Stop Service

With due allowance for the ravages of war, a certain section of the London Underground, containing three stations which we will call A, B, and C, has become for many the first line of offence. During the evening rush hours there is a series of non-stop trains, some of which dash through A alone, whilst others add B or C to their skipping list. Theoretically this is delightful, but of late someone has been throwing a spanner into the machinery. Loud cries, emanating from officials at, let us say, Z, have heralded a "rapide" of the A plus B or A plus C species, but alas! the train, with ideas of its own, has decided to take a rest at all three; alternatively, the announcers have put over an "all stations" forecast, speedily belied by the event. The first type of blunder has probably benefited sundry woolgathering commuters who pay scant heed to directions (in Gilbertian parlance "happy, undeserving A's"); the second, however, is less innocuous, and our heart goes out to those others ("wretched, meritorious B's," by the same token) who, on a night of Cimmerian gloom, have had the Pelion of overcarrying piled on the Ossa of overcrowding. In fact, we can foresee the creation of a song and dance at headquarters that will go down to posterity as the (55) Broadway Melody of 1940, and as it will be pitched in the keys of A, B, and C, residence at D is not going to deter us from adding this note to the uncommenced symphony.

Railways and War

APPRECIATION of the possibility of using railways for the transport of military forces and stores actually preceded the establishment of public railways in any part of the world. Improved communication between the Metropolis and various naval bases, particularly Portsmouth, was one of the strong points in the scheme of the Surrey Iron Railway promoters when, in the closing years of the eighteenth century, they projected a railway from the Thames to Portsmouth with the branch to Chatham. Actually only comparatively short sections of the scheme were translated into working railways at that period, namely, those from Wandsworth to Croydon (opened in 1803) and from Croydon to Merstham (opened in 1805), and it was mainly because of the success of Nelson at Trafalgar that Great Britain ceased to have that keen fear of invasion which had provided the driving force behind the original promotion of this scheme. When steam-operated public railways began to spread throughout the country, arrangements were quickly made by the military authorities for special provision for the transport of troops—as indeed had existed earlier with the canal companies—but all this is very far from the creation of a special organisation designed to ensure the efficient working of railways in time of war. The construction of railways in peacetime to serve war purposes, offensive or defensive, was advocated in both Germany and France about 1833, and became the recognised policy of certain of the Germanic states a very few years later. In contrast with this, this organisation of the whole railway system of a country to meet war needs did not receive widespread attention until the "60s." In particular, the American Civil War of 1861 to 1865 attracted notice to the necessity for the regulation of military traffic in general, under war conditions, and the valuable services rendered by the Construction Corps of the Federal Forces is generally considered to have been the direct inspiration of the action of Prussia in 1866 in establishing the *Feld Eisenbahnabteilung* (Field Railway Section) which eventually developed into a comprehensive scheme for the preparation for war by organising all phases of military rail transport.

What is far less generally realised is that the first attempt to create such an organisation in Great Britain owed nothing to either the U.S.A. or to Germany, but was due rather to considerations of national defence. At the present time it is of some interest to recall that our own efforts had their origin in the keen desire of 1859 that Great Britain should be organised to meet the hostile activities of France—then our hereditary enemy, and Volunteer Corps were formed with great enthusiasm. Eventually the Engineer & Railway Volunteer Staff Corps was established in January, 1865, "for the purpose of directing the application of skilled labour and of railway transport to the purposes of national defence, and for preparing, in time of peace, a system on which such duties should be conducted." The Corps, consisting of officers only, included General Managers and other officers of railway and dock companies, civil engineers, and contractors. Without tracing the whole history of the gradually improving organisation of railway transport for military purposes, it is of interest to notice in passing that in 1866 timetables for special troop trains had been compiled by the railway companies and printed in a 311-page octavo volume. The scheme then projected was that, in the event of war, the principal railway officers would become servants of the State for the time being, and that the railways would be operated and controlled by the officers of the Engineer & Railway Volunteer Staff Corps.

Towards the end of last century, the War Office decided that there should also be a supplementary body to co-

ordinate naval, military, and railway elements, and, in accordance with instructions issued by the Secretary of State for War, an Army Railway Council was established in 1896, and including Service representatives, railway managers, members of the Engineer & Railway Volunteer Staff Corps, a Board of Trade Inspector of Railways, and so forth. To meet the wishes of the Admiralty, the name was changed in 1903 from Army Railway Council to War Railway Council. This council dealt chiefly with establishing general principles, and most of the detail work was carried through by an Executive Committee appointed in October, 1903, and consisting of Staff Officers, Admiralty members, and railway general managers. Mobilisation and other timetables were prepared by the railway companies by November, 1904, and were revised from time to time (generally annually) thereafter. From 1911 onwards it was arranged that for this purpose one railway company should act as Secretary to a group of railways corresponding approximately to a Military command. During this period there was no clear understanding as to what control of the British railways would be exercised in time of war. The alternatives were for the railways to come under Government control under the Regulation of Forces Act, 1871 (as in fact did take place on the outbreak of war in 1914), or merely that priority should be given to military traffic under the terms of the National Defence Act of 1888, which empowered the Secretary of State for War to order the suspension of ordinary railway traffic, so far as might be necessary to further military purposes.

Eventually in November, 1912, the Railway Executive Committee was formed and was charged with the duty of carrying through all necessary war preparatory work and holding itself in readiness to undertake control on behalf of the Board of Trade of such railways as the Government might take possession in the event of an emergency. The announcement was made at the meeting of railway general managers presided over by the President of the Board of Trade of November 5, 1912, that the Government had no intention of superseding the existing managements of the railways during a period of State control. It was also arranged that the President of the Board of Trade should be the person to whom the Royal Warrant would be issued for taking control of the railways, and that he should be Chairman of the Railway Executive Committee. A railwayman, however, was to be Acting Chairman, and normally preside over the deliberations of the committee. The revisions introduced by the War Office in the winter of 1912-13 into the mobilisation timetables were so drastic that in 1913 the London & North Western Railway established a special committee to devote itself exclusively to this work. At this time the L.N.W.R. took a leading part in the various railway war arrangements, for, in addition to acting as Secretary Company for the Western Command, it undertook the main work of collating the various mobilisation timetables for presentation to the War Office as a complete work, and also supplied in the persons of Sir Frank Ree (its General Manager) the first Acting Chairman of the Railway Executive Committee, and Mr. L. W. Horne the first Secretary. The revisions were satisfactorily completed, and on January 28, 1914, the War Office issued provisional instructions to the railway general managers as to how they were to act in the event of an emergency.

On the death of Sir Frank Ree, on April 28, 1914, Sir (then Mr.) Herbert A. Walker, General Manager of the London & South Western Railway, became Acting Chairman of the R.E.C. (he had been appointed Deputy Acting Chairman in November, 1913) and continued to preside over the deliberations of the committee throughout the war. At the same time, Mr. Horne was succeeded in the secretaryship by Mr. Gilbert S. Szlumper. The committee

adopted for its headquarters the Parliament Street, Westminster, offices of the L.N.W.R., where six meetings were held up to the end of July, 1914. On the declaration of war on August 4, 1914, an Order was made by the Secretary of State for War, under Section 16 of the Regulation of the Forces Act, 1871, empowering the President of the Board of Trade to take possession of the railways, and at midnight on August 4-5 the War Office gave formal notification to 130 railway companies that control of their undertakings had been taken over by the Government. Under the terms of the 1871 Act, the warrant was valid for one week only, but it was made clear to the railways that this would be renewed from week to week until further notice. The official statement to the press referred to "Government . . . control over the railroads in Great Britain," and it was quickly made clear that Government control did not connote Government administration. As is well known, the railways remained under their peacetime managements, but under the general direction of the R.E.C. to secure the operation of Government traffic as if on a unified system.

The railways of Ireland were not within the scope of the Order, and it was the difficulty the Irish companies experienced in meeting wartime wage increases which eventually resulted in control of the Irish railways being taken over on January 1, 1917. An Irish Railway Executive Committee was formed with headquarters in Dublin, and the British R.E.C. appointed a sub-committee of its own members to deal with questions mutually affecting the two committees. Immediately after the war, the Ministry of Transport was formed by Act of August 15, 1919, and the formal transfer to the new Ministry of the transport functions of the Board of Trade took place on September 23, 1919. The life of R.E.C., as a department of the Board of Trade, thus came to an end, but the new Minister (Sir Eric Geddes) asked the R.E.C. to continue to serve "for the next week or two," and it ceased to function at the end of 1919; the final formal meeting took place on January 6, 1920. Control of railways continued, and the R.E.C. was succeeded by a Standing Committee of General Managers, which, however, was only an advisory body and had no executive powers over the controlled railways. Control ceased at midnight on August 15-16, 1921, and four days later the Railways Act of August 19, 1921, with its provisions for grouping, received the Royal Assent. The resultant formation of the four British main-line railway companies, and the establishment in 1933 of the London Passenger Transport Board, so reduced the number of railway operating units that many of the arrangements necessary before and during the war of 1914-19 have no counterparts at the present time. Nevertheless, the same broad policy of Government control, exercised through a Railway Executive Committee composed of general managers, applies today.

* * * *

Queensland Government Railways

TOTAL revenue earned in the year ended June 30, 1939, constituted a record for the Queensland Government Railways, it being £88,698 higher than for 1928-29 when the previous record was earned. Combined steam and motor train mileage again constituted a record, and for the third year in succession, the gross ton-miles exceeded all previous figures. In comparison with the year 1937-38 gross earnings showed an increase of £402,957 or 5.55 per cent. Working expenses advanced by £314,419 or 5.46 per cent., and net earnings improved by £88,538. They were, however, insufficient by £53,310 to meet interest on capital which, at the rate of 4.13 per cent. amounted to £1,641,727. For the previous year there was a deficit

of £129,091. The net earnings represented a return of £4 is. 6½d. per cent. on capital, against £3 17s. 9½d. in the previous year. The additional expenditure was caused principally by the increase in the basic wage from April 1, 1938, and other payments resulting from award variations and automatic increases in salaries and wages. Other reasons were the extra business handled, increased costs of fuel and stores, and additional sleepers, ballast, and materials for permanent way maintenance. Operating figures are compared as follow:—

	1937-38	1938-39
Miles open	6,467	6,467
Passenger journeys	25,601,382	24,549,088
Goods and minerals, tons	4,521,563	4,652,076
Train-miles	13,542,542	13,822,846
Operating ratio, per cent.	79.32	79.26
Passenger revenue	1,494,493	1,522,506
Goods and mineral receipts	4,383,992	4,627,918
Total earnings	7,254,388	7,657,345
Working expenses	5,754,509	6,068,928
Net earnings	1,499,879	1,588,417

An all-round increase in freights and fares was introduced as from November 1, 1938, and this mainly accounted for the advance of £28,013 or 1.87 per cent. in passenger revenue. For the first time since 1931-32 there was a decline instead of an increase in the total number of passenger journeys compared with the preceding year; the fall was 1,052,294 or 4.11 per cent. in comparison with 1937-38. This was due to the unsettled conditions arising from the general coal strike throughout the Commonwealth which began on September 9, 1938, and lasted for about 5½ weeks. Country passengers were 4,719,980, a decrease of 212,084, and the 19,829,108 of suburban passengers were 840,210 fewer than in 1937-38. The country passenger receipts of £1,214,169 showed, however, an increase of £21,345, and the £308,337 suburban passenger revenue was £6,668 higher. Total first class receipts amounted to £316,805, a decrease of £9,796 or 3 per cent., and represented 20.81 per cent. of total passenger revenue, against 21.85 per cent. in the preceding year. The second class receipts of £1,205,701 showed an increase of £37,809 or 3.24 per cent. Co-ordinated rail and road passenger and goods services, of which there are now 20, continue to function satisfactorily. Parcels traffic showed an increase of £16,524. Goods and mineral tonnage as a whole increased by 130,513 tons or 2.89 per cent., and the receipts therefrom by £243,926 or 5.56 per cent.

During the coal strike the Railway Department was faced with the prospect of serious dislocation, but this was averted by the use of firewood in conjunction with a comparatively small quantity of coal on most of the engines. Six locomotives of the "C.17" class (4-8-0) passenger and goods type and six "B.18½" class (4-6-2) passenger type were placed in service during the year. One 102 h.p. diesel rail motor and two trailers were placed in service during the year, and in the same period two 45 h.p. petrol cars were converted to 50 h.p. diesels and two 100 h.p. petrol cars to 102 h.p. diesels. Expenditure on maintenance of way and works increased from £1,478,412 in 1937-38 to £1,553,062 in 1938-39. Re-arrangement of the railway yard and work on the new passenger station at Roma Street, Brisbane, are progressing well. The arrival and departure of long-distance trains from Roma Street will free Central station for suburban traffic. North-bound trains will be diverted from Roma Street through the Normanby loop to Mayne junction. A turnover of £156,865 in the refreshment room services was the highest figure recorded since 1929-30 notwithstanding that train services were considerably curtailed during the industrial trouble in the coal mining industry in September-October, 1938.

LETTERS TO THE EDITOR

(The Editor is not responsible for the opinions of correspondents)

Dividends on Basis of Standard Revenue

Burgess Hill, Sussex, January 20

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—I notice that yesterday's issue of THE RAILWAY GAZETTE has two references to the present unsatisfactory position arising from the long time which the Government is taking in agreeing the terms for the use of the railways. The editorial comment is distinctly good. Mr. Ashley Brown's article, The "Too-Clever" People, although written lightly, contains wheat beneath the chaff. He might have made a strong point by demanding for stockholders the payment of dividends based on the assumption that Standard Revenue has been earned. The working out of the figures could be left over until the conclusion of the war. Such an arrangement would satisfy stockholders and stop agitation by them.

G. A. SEKON

Coning Wheel Tyres

London, S.W.1, January 20

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—Some months ago you made editorial reference to the origin of coning railway wheels, but the outbreak of war deprived me temporarily of access to some of the volumes to which I wished to refer after reading this. Now, however, I am enclosing copies of the two figures in von Gerstner's famous three-volume "Handbuch der Mechanik," published in Prague in 1831, which illustrated in detail a flanged railway wagon-wheel with 1 in 12 coning.

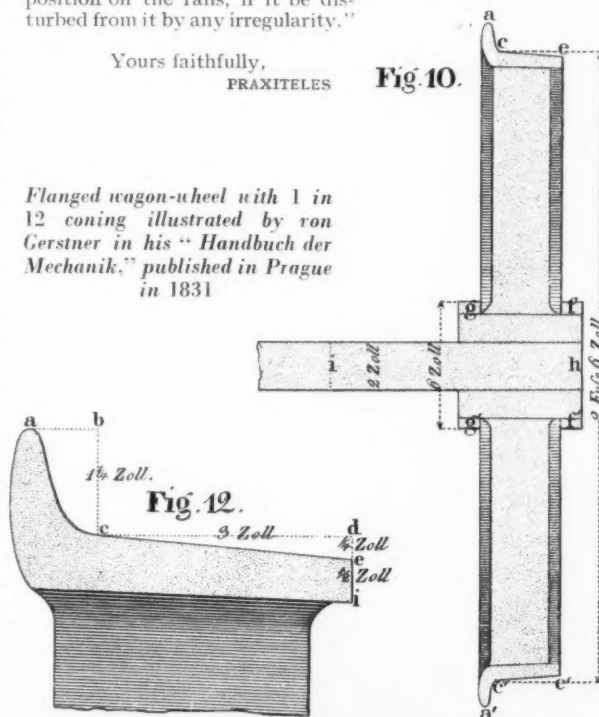
Thomas Tredgold also referred to the matter under the heading of "The Resistance at the Surfaces of the Rails" (in his well-known work entitled "A Practical Treatise on Rail-Roads and Carriages") and the following is an extract from the second edition, published in 1835:—

"It often happens, that a great part of the resistance at the rails arises from the lateral rubbing of the guides [flanges] of the wheels; therefore, it is desirable to give the wheels a tendency to keep in their path with as little assistance from the guides as possible. . . . This may be accomplished by making the rims of the wheels slightly conical. . . . The carriage will then return of itself to its proper position on the rails, if it be disturbed from it by any irregularity."

Yours faithfully,
PRAXITELES

Fig. 10.

Flanged wagon-wheel with 1 in 12 coning illustrated by von Gerstner in his "Handbuch der Mechanik," published in Prague in 1831



PUBLICATIONS RECEIVED

India Store Department.—Annual Report for the Year 1938-39. London: Office of the High Commissioner for India, Aldwych, W.C.2. 13 in. x 8 in. 24 pp. Price 3s. 6d.—The India Store Department is, in essence, a wholesale purchasing organisation, the function of which is to procure goods in bulk from manufacturers, inspect them, and ship them to India or Burma. During the period covered by the present report the number of contracts placed for stores and freight was 11,091, and the value £2,122,188. The expenses of running the department totalled £136,929. A large number of contracts are placed direct from India, and in these cases the department may operate in conjunction with the consulting engineers, and indeed the railway section of the report is occupied mainly with a review of the work carried out by Messrs. Rendel, Palmer & Tritton, who inspected contracts placed by the department to a value of £30,000, and under contracts placed from India, work to the value of £854,000. The total sum paid to the consulting engineers for their services during the year was £20,823, and some of the most important of

their activities were the preparation of drawings for bridges on the E.B.R. and the Burma Railways; an investigation into the Vierendeel girder for coaching stock frames; designs of the five new standard locomotive types; formulation of a code of practice for the electric welding of locomotive boilers; the revision of the standard specification for locomotives; and an investigation into rail welding by the Gennevilliers Thermit process.

Comparative Statement of Railway Operating Statistics. Steam Railways in the United States having annual operating revenues over \$5,000,000, years 1938, 1937, and 1936. Washington, D.C.: Superintendent of Documents, Bureau of Statistics, Interstate Commerce Commission. 17½ in. x 11 in. 113 pp. Price 60 cents.—This, the annual summary issued by the Interstate Commerce Commission, has been extended this year to give comparisons for three years instead of two, and the accounting and statistical figures from the returns of all the individual companies, for the year 1938, are compared with 1937 and

1936. The figures are given, as usual, with a profusion of detail, and the regional grouping is retained. There are, however, no aggregate totals shown for the railway system as a whole.

English Electric Products.—Descriptive leaflets received from the English Electric Co. Ltd., Kingsway, London, W.C.2, cover machine-tool lighting transformers (W 51); distribution fuseboards (W 67); synchronous induction motors (W 69); combination fuse switch short-circuit making tests (W 71); and portable transformers for safety handlamps (W 84).

Heat-Resisting Steels.—Six principal types of Era heat-resisting steels are now available to cover the very wide range in railway, oil-engine, general engineering, chemical engineering, and other industrial requirements for a steel which will retain its properties at high temperatures. A number of the brands, such as those used for firegrate constituents, are chromium alloys with resistance to scaling and sulphur attack at temperatures up to 1,150° C. All six types, with notes on their application and machining and welding characteristics, are described in publication No. 436, received from Hadfields Limited, East Hecla works, Sheffield.

THE SCRAP HEAP

"TUBER" TRAVEL DE LUXE

Owing to shortage of suitable wagons, potatoes in Germany are to ride in third class carriages. Our sympathy is extended to certain "old beans" in Britain, who, on February 1, will be doing likewise.

CONTROL STAFFS NUMBER 4,250

The most complete record yet published of the network of Government controls of commodities was given recently in the House of Lords. Particulars are given of 30 controls, and staffs totalling 4,250. The biggest staff, 909, is that of Sir Harry Shackleton, who controls wool. Sir Francis Boys has more than 800 officials dealing in meat and livestock, and Mr. J. F. Bodinnar nearly 500 for bacon and ham. Major A. I. Harris controls timber with 583. Mr. H. O. Hambleton has a staff of four for silk control, and Mr. F. C. O. Speyer has nine to control industrial ammonia.

NEW CHILDREN'S RAILWAYS IN RUSSIA

At Gorky (formerly Nijni-Novgorod) a new children's railway, the twelfth and longest line of its kind in the Soviet Union, was opened recently. The route length of the new railway, which connects Gorky with the Molotov Automobile Works, is 5½ miles, and the track mileage totals 7½ miles. The opening was attended by thousands of school children. The first train, manned by children who had gone through a special course of training, was worked with an eighth-form schoolgirl at the regulator. Some 1,500 school-children

of Gorky, future engine drivers, station-masters, &c., will take their turn at practical railway operation on this line every fifth day. Lev Pochinko, a schoolboy of the ninth form, has been appointed Traffic Superintendent; Aziz Nigmatulin of the eighth form is Superintendent of the Rolling Stock, and Genadi Veselov, a tenth form boy, is Stationmaster.

More than 2,000 Moscow school children are now taking preliminary training to operate what is to be the largest children's railway in the Soviet Union. The railway is scheduled for construction in the spring, and will comprise an electric and a steam traction line. Looping 6½ miles through woodland, the electric line will have its head and terminal at the Stalin Sports Stadium now under construction. The steam line, approximately half the length of the electric line, will also run through the Moscow woodland belt.

"HUMOROUS AND TRAGIC"

A correspondent in Paris writes: A large crop of active service newspapers have sprung into existence, many of them written, composed and printed under the most trying conditions. One is called *Le Tortillard*, a name for the fast-disappearing local country, single-track railways, whose engine drivers willingly stop in the middle of a deserted stretch while a peasant woman climbs aboard with her baskets. It describes itself in a sub-title as "humorous, tragic and dramatic." Another is *La Vache qui Rit* (The Laughing Cow),

date of publication irregular. The classified advertisements of *Le Tortillard* call for engineers with corns, as weather experts.—From the "Liverpool Post."

VOICE OF THE SHAREHOLDER

"I can squeak as a big deferred shareholder like our other deferred shareholders on the reduction of 1 per cent. in my dividend."—Mr. H. Cosmo Bonsor, Chairman, South Eastern Railway, at the annual meeting on February 11 1915, vide "The Railway News."

While at his Adirondack camp, J. P. Morgan, Sr., one day decided suddenly to return to the city, and telegraphed the President of the railroad that he wished the 10.24 stopped at the station. When he arrived, five minutes before the train, the little stationmaster, a true Adirondacks product, was industriously checking figures.

"You got your orders to flag the train this morning," Mr. Morgan stated.

"No, I didn't get no orders to flag no train this morning." The stationmaster went on scribbling.

"You mean to say you're not going to flag this train?"

"Nope, not without orders."

Mr. Morgan hurried into the station and emerged carrying a red flag. A whistle was heard up the track. Mr. Morgan flourished the flag, and the train came to a stop.

"You'll hear about this," Mr. Morgan told the stationmaster as he boarded the train.

"Don't get excited," was the reply. "The 10.24 allus stops."—James Barnes, "From Then Till Now." (Reader's Digest.)

OVERSEAS RAILWAY AFFAIRS

(From our special correspondents)

UNITED STATES

Finances and Traffics

The railways in this country have ended the year 1939 with total net earnings (after taxes but before interest on bonded indebtedness) totalling approximately £120,000,000, or at the annual rate of approximately 2.3 per cent. on the investment. These earnings may be compared with £74,500,000 in 1938, £118,000,000 in 1937, and £133,400,000 in 1936.

A great increase in traffic occurred in September, and persisted throughout the remainder of the year, becoming so great in October (the month when peak traffic conditions always occur), that the railways narrowly missed experiencing a shortage of rolling stock due to the fact that their supplies of such equipment had steadily declined over many years.

This increase in railway traffic, and in industrial activity, is not traceable to any increase in export business since the outbreak of hostilities in Europe, and is ascribed by most observers to domestic causes. In recent weeks the acceleration in traffic and industrial production has decreased somewhat, and the maintenance of traffic in 1940 at the levels of October and early November, 1939, is not expected.

Rolling Stock Orders Increase

The revival of traffic in the autumn brought the railways scurrying to the rolling stock manufacturers for additional freight cars. Orders for such vehicles for the entire year totalled about 54,000. In addition, some 375 locomotives and 300 passenger vehicles were ordered. Of the locomotives, the bulk of the new ones have been diesel-electrics for shunting; these are rapidly replacing steam locomotives for such work.

New Low-Fare Streamliners

The Atlantic Coast Line and the Seaboard Air Line on December 1 inaugurated daily diesel-electric stainless steel streamlined coach trains between New York and Miami. These trains are luxurious in every respect except that they do not provide berths for sleeping. Instead reclining chairs and dimmed lights provide dozing conditions for those for whom slumber is not too difficult. Each train has a dining car where excellent *table d'hôte* meals are to be had at 2s. for breakfast and luncheon, and 2s. 6d. for dinner. Each train also has roomy lounge and bar facilities. The trains are scheduled to cover the distance of nearly 1,300 miles in 25 hr. The fare is low, only about £8 8s. for the return journey between New York and Miami, and the trains have been fully booked up weeks in advance since their inception.

They consist of seven cars each, and

are hauled over the Pennsylvania road by its electric locomotives between New York and Washington, the power for the rest of the journey being supplied by diesel-electric locomotives. To maintain this daily service in each direction, both of the railways have three complete trains. In addition, the Florida East Coast has a similar train which it operates daily in both directions between Jacksonville and Miami.

Improved Freight Service

The Union Pacific has recently made strenuous efforts to recapture traffic, which it had lost to the road, by improving its services to traders dealing in less-than-carload shipments. Not only have schedules been quickened, but the company has provided new and distinctive cars designed to give this traffic better-riding bogies and smoother couplers and drawgear. In addition, the cars are equipped with steam heating and an air signal line (similar to the passenger cars), the latter to enable trainmen to communicate with the locomotive without resort to the destructive expedient of "pulling the air."

Equipment manufacturers and traders alike are at present keenly interested in securing cars which will prove "easy" on lading and reduce packaging costs, and considerable development in this direction is to be expected during the course of the coming year.

CANADA

New Refrigerator Cars

The Canadian National Railways are at present building 100 refrigerator cars of an improved type. It is said that each will carry twice the load of the ordinary refrigerator car and yet use only half the quantity of ice. On a trial run the temperature of the meat in one of these new cars, carrying over 26 tons of bacon, varied by only 1° throughout the course of the run. Overhead ice tanks are used.

ARGENTINA

Big Cotton Crop

Although, as already stated, weather conditions this year have been unfavourable to the wheat crop they have been beneficial to the growth of the cotton plant, the successful cultivation of which in recent years has added yet another important industry to the national economy, and promises before long to place Argentina among the world's foremost cotton-growing countries. According to the figures issued by the Ministry of Agriculture, this year's cotton crop is estimated at 70,891 tons, as compared with 51,445 tons last year, an increase of 19,446 tons, or 38 per cent.

The following table shows the production in tons during the last five years:—

Year	Tons
1934-35	64,038
1935-36	80,957
1936-37	31,170*
1937-38	51,445*
1938-39	70,891

* In these years production was adversely affected by drought.

Institution of Railway Signal Engineers' Meeting

The annual general meeting of the Buenos Aires branch of the Institution of Railway Signal Engineers was held on November 22 under the presidency of the Chairman, Mr. F. Foulsham. The report on the year's activities, presented by the Honorary Secretary, Mr. F. E. Goss, stated that the number of members on the roll of the branch was 36. The Chairman announced that owing to the European war the annual dinner would not be held this year. The following committee was elected for 1940: Chairman, Mr. O. T. Wood; Vice-Chairman, Mr. J. Runnett; Honorary Secretary & Treasurer, Mr. F. E. Goss; Members, Messrs. J. Graham, C. T. Comber, and L. Partington. Substitute, Mr. J. A. McPhail. At the conclusion of the annual meeting Mr. J. H. Graham read a paper entitled "Some notes on level crossing protection," which was afterwards discussed.

BRAZIL

New Railway Sanctioned

The Brazilian Government has issued a decree approving the project of constructing a 144-km. section of what will eventually be a Brazil-Bolivia railway, between San Jose de Chiquitos and Poso del Tigre. An initial sum of 25,941 contos has been sanctioned towards the cost of the line.

NEW SOUTH WALES

Signalling Progress

Government Railways have continued to extend the use of the most modern signalling equipment wherever opportunity has presented itself. The report for the year ended June 30, 1939, shows that important power and automatic signalling work was completed, resulting in considerable savings in working costs. An interesting item is an improved design of tablet and staff exchanging equipment installed on the Cootamundra-Albury line, enabling perfectly satisfactory exchanging at up to 70 m.p.h. Telephone traffic control equipment now operates over the whole route from Sydney to the Victorian border, and on 3,292 out of 6,114 route miles altogether. Track circuit signalling is used on 436 miles of route, absolute manual block on 284 miles, electric staff on 3,030 miles, tablet on 166 miles, train staff and ticket on 2,299 miles, and other systems only to a very small extent. Failures have been greatly reduced in recent years, their percentage being now only 0.0079 in the electrified area.

VICTORIA

Inauguration of Wheat Handling in Bulk

The first scheme in this State for handling wheat in bulk will begin to materialise in December when part of it, serving the great Geelong terminal elevator, will be brought into use. It entails the use of 53 elevators, including 6 owned by millers, having a total storage capacity of over 6,000,000 bushels. The complete scheme for the area concerned, which embraces the Mallee and Wimmera Districts, provides for no fewer than 91 elevators.

The railway is busy wheat-proofing trucks, of which there are now 1,200 suitable for carrying the grain in bulk, out of 1,450 to be ready by the end of the current financial year. By placing canvas aprons over the doors, ordinary goods vehicles can also be used.

MANCHUKUO

An Epoch in Railway Development

All over this country the fact that the aggregate length of its railways has now passed the 10,000-km. mark has recently been celebrated as an epoch-making event, not only in the history of Manchukuo transport, but also of Oriental civilisation in general. It is the more remarkable when one appreciates that when the State became a separate entity in 1932 it possessed only 4,500 km. of line, and that despite constant trouble in the shape of armed bands all over the country, a further 4,000 km. of line has been built since 1931, a striking tribute to the combined enterprise and efficiency of the South Manchuria Railway and the Government.

Manchurian railway history opened in 1896, only 44 years ago, when a section of the Peking-Mukden Railway east of the Great Wall was opened, the first line in Manchurian territory. The Chinese Eastern line was completed in 1904, and these two railways, products of British and Russian enterprise, completed the first stage in the country's railway history.

Formation of S.M.R.

The South Manchuria Railway Company was formed under Imperial Ordinance No. 142 of June 7, 1906, which laid down that its shares must be owned only by Chinese or Japanese nationals or their Governments. It was during this second stage that the company built the Changchun (Hsinking)—Kirin and Ssuningkai—Taonan lines. After the world war came the third stage, accompanying the emancipation of Manchuria, and in it the construction by the S.M.R. of the eastern trunk line *via* Mukden, Kirin, and Tunhwa, the western trunk line, and the southern line from Chaoyang.

The fourth period opened with the establishment of the Manchukuo State, and the organisation of the State Railways system, under the management of the S.M.R. The very rapid develop-

ment of the remainder of the present railway system has been the subject of frequent record in these pages, including the purchase from Russia of the Chinese Eastern Railway, the last instalment of the cost of which has just been paid, 1,700 miles in length.

INDIA

Control of Wagons

The Government of India has been considering the question of improving the supply of railway wagons, particularly in the coalfields. For some years past, there has been a seasonal shortage of wagons in the opening months of the year and the increasing demands make it likely that, unless special steps are taken, serious difficulties in meeting the requirements of the public may ensue. The possibility of appointing a controlling officer with powers of control over wagon supply has been examined, but the Government of India is not satisfied that there is such an emergency as to require any drastic steps at present, and it expects that any difficulties that may arise can be surmounted by improvements in operation and adequate co-operation on the part of the coal trade and consumers. The Government has accordingly appointed Rai Bahadur N. C. Ghose, Divisional Superintendent, East Indian Railway, to a special post of Transport Advisory Officer to assist, until further notice, the two administrations principally concerned, the East Indian and the Bengal-Nagpur Railways, in dealing with demands for wagons. His chief duty will be to keep under constant examination the movements of wagons and particularly wagons for coal, with a view to ensuring that all wagons are put to the fullest possible use. Mr. Ghose will be expected to scrutinise indents for wagons so as to ensure that consumers on the priority list maintained by the Coal Wagon Supply Committee do not receive wagons in excess of their requirements. It is intended that as large a supply as possible will be made available for other consumers. The Transport Advisory Officer will work in close co-operation with the Chief Mining Engineer, the Director of Wagon Interchange, and the administrations of the E.I.R., B.-N.R., and E.B.R.

Reorganisation of Central Publicity Bureau Projected

It is understood that the Railway Board is in consultation with the administrations of the East Indian and Eastern Bengal Railways on the question of reorganising the Central Publicity Bureau and the Publicity Sections of the two railways. There is every possibility that a scheme may be adopted under which the publicity work of these railways will be entrusted to the Central Publicity Bureau which will function from Calcutta. The amalgamation, if brought into effect, is expected to result not only in substantial savings but in co-ordination of effort.

SWITZERLAND

Christmas and New Year Traffic

The almost total lack of foreign visitors on account of European conditions resulted, as was to be expected, in a marked decrease in holiday traffic as compared with 1938-39 figures. During Christmas week (December 20 to 26) the Federal Railways ran 217 special trains, as against 625 the previous year, and passenger receipts amounted to fr. 3,013,300, or a decrease of about fr. 200,000; this figure does not, however, include receipts from military traffic originating at a number of small stations from which soldiers returned home on leave. Conditions were better during the New Year week (December 27 to January 2), when 253 specials were run on the Federal lines (as against 490), and receipts were some fr. 345,000 above those of the previous year and amounted to about fr. 3,100,000. Most of the winter sport resorts reported excellent numbers of Swiss visitors.

School Children's Winter Sports Excursions

Generous facilities are now granted by the Federal Railways and most of the private companies for conducted winter excursions of parties of pupils from public and private schools, with a view to attracting traffic from points some distance from suitable resorts. The lowest existing rates, namely, those for parties of children under 12, with reductions between 65 and 75 per cent., are applied in such cases, irrespective of the children's actual ages.

SPAIN

Frontier Communications

Direct communication between France and Spain, which was interrupted in July, 1936, at the outbreak of the Spanish civil war, has now been restored, and express passenger trains in each direction again cross the frontier. At the Catalanian end of the Pyrenees the Barcelona train now runs through, on the transition track, to Cerbere on the French side of the frontier, and the French trains terminate at Port Bou, on the Spanish side. In the same way trains at the other end of the Pyrenees now run directly from France through to Irun, and from Spain through to Hendaye. A conference is being arranged for an early date when the railway connections between France, Spain, and Portugal will be agreed upon by those countries.

Oviedo Station

It is announced by the management of the Northern Railway that the construction is contemplated of a new station at Oviedo, the ancient capital of Asturias. It is to be built on modern lines and on a scale to provide for future expansion, for which purpose extensive variations are proposed of the line between the Vega tunnel and the Argüeso bridge.

THE RAILWAY COMPANIES' ASSOCIATION

An account of the development since 1854 of an important voluntary organisation of British railways

Within recent years the Railway Companies' Association has been the organisation through which the Government has communicated with the main-line railway companies in order to discuss matters of national policy. It was through this association that preliminaries were conducted, preparatory to the formation of the Railway Executive Committee. As very little is known of the development of the association, we are reprinting the following article (brought up to date) which was contributed in 1914 to the Jubilee Number of our constituent, "The Railway News," by the late Mr. Arthur Beresford Cane, for twenty years Secretary of the Railway Companies' Association. Mr. Cane died on December 21 last; his portrait and a biographical note were reproduced in our issue of January 5.

THE Railway Companies' Association is a voluntary association of railway companies established for the purpose of mutual consultation upon matters affecting their common interests. It is the result of a gradual development. In its earliest form it had its origin in a meeting of directors and others interested in railways, held at the King's Arms, Palace Yard, Westminster, on March 30, 1854. The object of the meeting was to consider certain important legislative proposals, founded upon the report of the Select Committee of 1853, which ultimately resulted in the Railway & Canal Traffic Act, 1854. The meeting appointed a committee "to consist of the Chairman and Deputy-Chairman of each railway company (with power to add to their number), to take such steps as may be considered necessary for bringing the proposed alterations in the law fully and fairly under the consideration of Parliament." This committee employed as its executive officer Mr. Thomas Coates, a well-known Parliamentary agent. The necessary funds were provided by a call upon the companies represented; 23 out of 72 principal companies then existing appear as contributors.

The committee of 1854 was a purely temporary organisation, constituted in view of a particular emergency. It appears, however, to have continued in existence in 1855, and to have taken action in connection with the Metropolis Local Management and the Railway Accident Bills of that year, though there is no record of any fresh appointment of the committee. On December 12, 1855, a meeting of railway deputies, held at the Railway Clearing House, resolved that a permanent committee should be appointed for the protection of railway interests in Parliament, with Mr. Coates as Secretary. The committee was to consist of one delegate to be appointed by each company, and also of such directors as might be in either House of Parliament.

On March 12, 1856, a further meeting of railway deputies appointed a sub-committee (of whom five were Members of Parliament) "to whom Mr. Coates could refer for advice and aid in reference to Parliamentary questions affecting railway interests." This sub-committee, which appointed a finance committee on July 3, 1863, continued in existence until November, 1867, when Mr. Coates resigned. The sole function of the committee appears to have been to watch legislation. On important occasions meetings of railway directors were summoned, presumably at the instance of the committee. Records of these meetings, as well as of the proceedings of the committee, appear in minutes kept by Mr. Coates. The last meeting of the committee was held on July 9, 1867. This committee appears to have been commonly described

as the Railway Companies' Association, though it never formally assumed the title.

The Nucleus of the Present Association

On June 26, 1867, a new organisation was formed among the principal Northern companies, which described itself as the United Railway Companies' Committee. This committee, which in May, 1869, assumed the style of the Railway Companies' Association, was the nucleus of the association now existing. It was a standing committee formed by five companies "to consider questions affecting specially these companies or generally the whole railway interest, and, if practicable, to recommend to their respective boards some uniform course of action with reference thereto." Each company was to be represented by its Chairman, Deputy-Chairman, General Manager, and Solicitor. The committee was to meet monthly during the session and quarterly during the remainder of the year. Special meetings were to be called when required. The resolutions passed at this meeting formed the complete constitution of the association until the year 1898, when a reorganisation of its internal machinery was effected; they still regulate the representation of the members upon the association, and remain the measure of its authority to represent the constituent companies.

The original members were the Great Northern, the Lancashire & Yorkshire, the London & North Western, the Midland, and the North Eastern. The Great Western was added at the fourth meeting of the committee. In the course of the year 1868 the principal Scottish railways, the Great Eastern, the London & South Western, and the Furness Railways became members of the United Committee. In 1873 they were joined by the Manchester, Sheffield & Lincolnshire, the London, Brighton & South Coast, and the London, Chatham & Dover Companies. The first of the Irish companies to join the association was the Great Southern & Western, which became a member in 1884. At the date of the reorganisation, in 1898, 39 railway companies were members of the association.

On January 16, 1868, the United Committee made its first appointment of a Chairman and officers. Mr. H. S. Thompson (North Eastern) was appointed Chairman; Mr. B. Westhead (London & North Western) Deputy-Chairman; and Mr. Blenkinsop (London & North Western) Honorary Consulting Solicitor. Mr. Henry Oakley (Secretary of the Great Northern Railway), who had been appointed Honorary Secretary at the second meeting of the committee in July, 1867, was reappointed. The constitution contained no provision as to the duration of any of these offices. Mr. Thompson continued Chairman until 1874, when he was succeeded by Mr. Leeman, M.P. (North Eastern), who remained in the office until 1880. Subsequently the office was held for six years by Sir Daniel Gooch (Great Western, 1881 to 1886), and Lord Stalbridge (London & North Western, 1894 to 1899). The office of Consulting Solicitor was held by Mr. Blenkinsop until his death in 1872; Mr. Young (Great Western), Mr. Roberts (London & North Western), and Mr. Beale (Midland) were then jointly appointed Honorary Consulting Solicitors. Subsequently the office was held by the Solicitors of the same companies, with the addition, made in 1913, of the Solicitor of the London, Brighton & South Coast Railway Company. Mr. Oakley, who became General Manager of the G.N.R. in 1870, and was knighted in 1891, held the office of Honorary Secretary until 1900.

At first the meetings of the association were held at the offices of the Midland Railway Company in Great George Street. Subsequently meetings were also held at the offices of the London & North Western Railway Company in Parliament Street. Early in its history the association seems to have made arrangements for the exercise of its functions through a smaller body, though there was no express delegation of powers. In January, 1868, a sub-committee was appointed, consisting of the Chairman, Deputy-Chairman, and five directors, all of the five directors being Members of Parliament. In 1869 this sub-committee was replaced by a body called the Parliamentary Sub-Committee, consisting of the Chairman, Deputy-Chairman, and six other members. The numbers of this sub-committee were increased to fourteen between 1870 and 1874. It is probable, however, that these small committees were found to be not sufficiently representative of the numerous interests concerned, for in 1874 it was resolved that the Parliamentary Committee do consist of the Chairman, Deputy-Chairman, and all Members of the Lords and Commons on the boards of the respective companies.

Besides these committees, meetings of general managers and solicitors; of general managers, goods managers, and solicitors; and of general managers and consulting solicitors; were convened from time to time, which appear to have been treated as committees of the association. Meetings of this character were particularly numerous in 1889, in connection with the new classification and schedules of rates deposited by the companies. Like the committee of 1854, the association (1867-1899) concerned itself principally with current legislation, but it also dealt with a much wider range of subjects, including correspondence with the Board of Trade upon a variety of technical and practical matters.

Owing to the increase of its members, the association became in course of time an inconveniently numerous body for executive purposes, and proposals for its reorganisation, which were, however, abortive, were made as early as 1881. In March, 1894, Sir Henry Oakley having expressed a desire to retire from the office of Honorary Secretary, a meeting of general managers was held at Euston "to consider the desirability of making any report or recommendation to the Railway Association for the future conduct of its business on the retirement of the Honorary Secretary." The meeting agreed to recommend "that a properly qualified man should be appointed as a paid Secretary, and that offices in Westminster should be taken, at which the business of the association should be conducted under such rules and regulations as the directors might from time to time decide upon." This resolution was reported to the association, but Sir Henry Oakley was prevailed upon to continue in office, and nothing was done until March, 1898, when he retired from the general managership of the G.N.R. and was appointed to a seat on the board of that railway.

At a meeting of the association held on March 15, 1898, it was resolved that a committee should be appointed to consider the reorganisation of the association. On June 9, 1898, the committee made its report, and on June 30 the report was approved by the Council. The principal features of the scheme were:—

(1) The appointment of a council which should have power to represent the Railway Association on all questions affecting general railway interests, and to refer questions affecting particular companies to those companies.

(2) The appointment of a paid Secretary, with offices near Parliament Street, and a small staff, who should act under the instructions of the council on all matters affecting the general interests of railway companies, both in and out of Parliament.

On February 22, 1899, the new constitution was adopted by the association, but no paid Secretary was appointed till October 12, 1900, Sir Henry Oakley continuing to act as Honorary Secretary. In October, 1900, Mr. (now Sir Guy) Granet was appointed Secretary, and the association took possession of offices at 53, Parliament Street, Westminster. The council, which, under the provisions of the reorganisation of 1898, consisted of five members, in addition to the Chairman and Deputy-Chairman, was afterwards enlarged, and in 1914, immediately before the outbreak of war, consisted of 28 members, namely, 15 members directly nominated by the companies, who must be directors, and were usually, though not necessarily, chairmen; 3 directors, appointed from and by the Members of the House of Commons who were also railway directors; and 10 general managers, nominated by the General Managers' Conference at the Railway Clearing House. The meetings of the council were also attended by the Honorary Solicitors, four in number. Four ordinary meetings of the council were held in every year on fixed dates, and special meetings were called when occasion required. An annual general meeting of the association was held within one month from the opening of Parliament, for the election of the Chairman, Deputy-Chairman, council, and officers, and other business. Other meetings of the association were summoned when necessary.

The association always preserved its original character of a purely voluntary association, and was most careful to safeguard the independence of its individual members. It was, moreover, expressly provided by the constitution that no action should be taken by the council unless the members were unanimous. Though under the constitution the council had power to represent the association on all questions affecting general railway interests, the association itself had no further powers than those which were originally conferred upon the United Committee at its foundation in 1867, namely, "to consider questions affecting specially these companies" (*i.e.*, the members of the committee) "or generally the whole railway interest, and, if practicable, to recommend to their boards some uniform course of action in reference thereto."

The Result of Grouping

As a result of the amalgamations effected under the provisions of the Railways Act, 1921, the number of member companies of the association was reduced to four, namely, the London Midland & Scottish, the London & North Eastern, the Great Western, and the Southern Railways.

This smaller membership enabled the council to be dispensed with, and from that time each of the four amalgamated companies has been represented on the association by its Chairman, Deputy Chairman, General Manager, and Solicitor. Normally the association holds four ordinary meetings on pre-arranged dates every year, but special meetings are summoned as required. This also applies to the General Managers' Committee, but the Solicitors' Committee meets at unspecified intervals as often as circumstances may render necessary. The offices of the association were transferred in 1922 to 35, Parliament Street, Westminster, and again in October, 1937, to Fielden House, 10, Great College Street, Westminster, London, S.W.1.

There have been four secretaries of the association since the reorganisation of 1898, namely, Sir Guy Granet, appointed in October, 1900; Mr. W. Temple Franks, appointed in July, 1905; Mr. Arthur Beresford Cane, appointed in March, 1909; and the present Secretary, Mr. G. Cole Deacon, who took office on January 1, 1930.

THE NORD-BELGE SYSTEM

Some notes on the history of the lines in Belgium owned or worked by the Northern Railway Company of France

By LIONEL WIENER

THE Nord-Belge is not a subsidiary of the French Nord, but is simply a special committee of Nord officers formed within the structure of that company for operating a group of lines, now 202 km. (125.5 miles) in extent, which the French Nord leased from three separate companies:—

Mons to Haumont & St. Ghislain;
Charleroi to Erquelinnes;
Namur to Liège & Extensions.

The lease was for one day less than their concessions run. This grouping of widely separated lines in the hands of a single committee may seem unusual, yet it provides the French Nord with the extensions into foreign territory which it desired. The first takes it to Mons and towards Brussels, and the second (if we except the Charleroi—Namur section) as far as Liège, but the importance of the Givet—Namur section is not so readily apparent as it seems to be merely an extension of the former Est line into Belgium. Taken, however, in conjunction with the Chimay Railway Company's line from Anor to Hastière, with which the Nord has a curious operating arrangement, it provides an all-Nord route of 372 km. from Paris, through Soissons, Laon, Anor, Chimay, and Namur, to Liège, alternative to the mixed Nord and former Belgian State route Paris—Erquelinnes—Namur—Liège of 367 km. Before the Nord-Belge is considered as an entity it is advisable to show how it came into being and to give therefore some description of the various separate companies whose lines it operates.

Charleroi & French Frontier Railway Company

In 1845, when the railway fever was at its height, British financiers applied for railway concessions in Belgium, generally without knowing anything of local conditions so they subscribed to any clauses the contracts contained. In most cases they would have come to grief had not the Government been loth to tie them down to their promises. In addition there were the financial crises of 1846 and 1847 and a political crisis in 1848, so it is hardly surprising that the original subscribers were unfortunate. A concession for a railway from Marchienne, near Charleroi, to Erquelinnes, at the French frontier, was awarded in May, 1845, to A. H. Neville & Company. Besides collecting coal and machinery from the Charleroi district it was to form part of the Cologne—Paris through route, and was therefore a good proposition. But the cost of constructing the line of 30 km. (18.6 miles) was exceptionally high—fr. 800,000 a km. (£51,500 a mile), as the river Sambre had to be crossed and recrossed 15 times. In the meantime the company had fallen on evil days and it was only when the Government came to the rescue with a ten-year guarantee of 5 per cent. interest on the amount that was still required, that the line was completed in 1852. The company's property begins at the halt of La Sambre, whence it has running powers eastwards over 3 km. of the State Railways into Charleroi-Sud. From La Sambre it also has running powers over 3 km. of the State Railways north-westwards into Marchienne-au-Pont. The workshops are situated at St. Martin.

On November 3, 1854, the line was leased to the Nord Railway Company until the day before the concession

should lapse. Outstanding debts were to be paid, interest on debentures and sinking fund were to be provided by the Nord, and fr.16.875 a share paid annually as dividends. The total annual rental thus amounted to about fr.400,000 (roughly £16,000).

Namur & Liège and Mons-Manage & Extensions Railway Company

The concession for the Namur—Liège Railway of 73 km. was granted in 1845 to A. W. Spottiswoode & Company. Like all those enterprises of the period save the Antwerp & Ghent Railway of 1842 it was a British concern. The line between Namur and Liège, which is of great economic and strategical importance, divides at Flémalle (48 km. from Namur) into two branches running along each bank of the river; the left-bank line of 12 km. runs into the Liège Guillemins station of the State Railways, and the other, only one kilometre longer, into Longdoz, the Nord's own terminus at Liège. A separate line of 26 km. (16 miles) from Mons to the central coalfields in Manage, and the 8-km. La Louvière Bascoup branch were added to the concession. Under the terms of the concession these lines should have been completed in 1847, but the company, like so many others at the time of the railway fever, got into difficulties, and it was not until 1851, that they were completed with the aid of a Government loan. The Nord obtained, as from January 1, 1855, a lease of the Namur—Liège Railway, and this, with running powers over the State Railways between Charleroi and Namur, gave it a through route from the frontier at Erquelinnes to Liège. The annual rental of the Namur—Liège lines was fixed at fr.1,000,000 (£40,000) besides purchase of rolling stock, and so forth. The next step was the signing of a contract on April 30, 1856, under which the Nord was to take a lease of the Mons-Manage Railway. But as the Nord had already leased the line from the frontier into Mons, the line to Manage would have given it too great a hold on Belgian industries and coal mines and the Government withheld its consent. The shareholders protested, so the State bought back the Manage-Mons Railway for the price previously offered by the Nord.

Compulsory New Construction

The Namur—Liège concession contained also a clause stipulating that, should a French railway reach the Meuse at or near Givet within the next ten years, the company should construct and work an extension from Namur through Dinant and further up the Meuse Valley to Givet. A French Imperial decree of June 10, 1857, granted a concession to the Ardennes Railway Company (which later became part of the Est) for a railway down the Meuse valley from Charleville to Givet, near the Belgian frontier. The Belgian Government thereupon ordered the Namur—Liège Company to build the link between Namur and Givet as its concession obliged it to do. The Nord, however, forbade this because of the contract between the two companies which prevented the Belgian company from constructing or working any line branching from its existing system. A way out of the difficulty was found by the Nord undertaking to construct and work the line. Construction and equipment were financed by the Namur

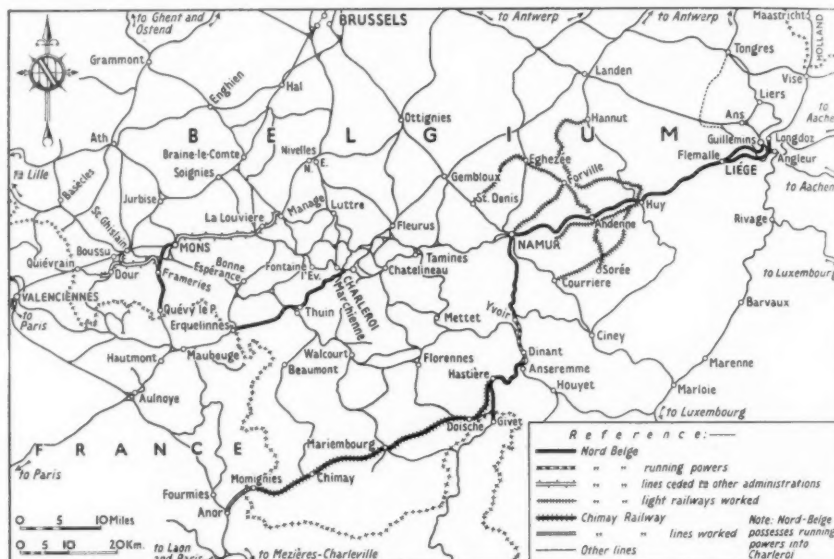
Company issuing debentures, interest and sinking fund on which were guaranteed by the Nord. This 50-km. extension was opened to traffic in 1863. This was but another instance of the penetration into the country of foreign lines and influence, which was to come to a climax in 1868 through the purchases and leases of the Est, and was to cause a special law to be passed prohibiting transfers or leases without Government approval. The importance to the Nord of the extension was that the greater part of the coal used in the part of France the railway tapped came from the Liège coalfields, and thus traversed the entire length of the line.

Mons to Hautmont & St. Ghislain Railway

The Mons to Hautmont & St. Ghislain system originally included two groups of concessions granted many years apart. The first was granted by the Belgian Government in 1836 for a period of 90 years for a 14-km. tram line to connect the collieries west of Mons with the River Sambre and the Mons & Condé canal. This line was first operated on an inclined plane, which was replaced by

The railway was completed between Mons and Hautmont in 1858 and on June 4 of that year the Belgian portion was leased (as from July 1) to the Nord Company which had previously acquired the lease of the Charleroi-Erquennes Railway and wished to extend its system into the Mons coalfields as it had done into those of Charleroi. The rental was fr. 1,200,000 (then £48,000) which enabled a yearly 8 per cent. dividend to be declared. This arrangement was not sanctioned by the Belgian Government until four years later. The French part of the system, from the frontier to Hautmont and Maubeuge was acquired in 1859 by the Nord, thus reducing the mileage to 43 km. (27 miles). A further reduction in this system took place on January 1, 1867, when a lease was granted of the St. Ghislain section of 22 km. (12.4 miles) to the Bassins Houillers du Hainault Railway Company, which had sought powers to construct a direct line from St. Ghislain to Frameries. The Nord would have been unable to compete with it as its own route was tortuous. It retained only the 16 km. of the Mons—Frameries & Frontier international line. This was only an episode in the long

Map showing the Nord-Belge Railway and its associated systems in Belgium



locomotives in 1851. It was transferred in 1842 to the St. Ghislain Railway Company. The second group consisted (i) of a concession by Belgium in 1853 for a railway from Mons to the French frontier, and (ii) of a concession granted by French Imperial Decree in 1854 for a line from Maubeuge to Hautmont and the Belgian frontier. The concessions for both these sections were originally granted to Rothschild Bros. and the Société Générale. Of this group of 34 km. (21 miles) roughly half was on each side of the frontier. The St. Ghislain and the Mons—Frontier—Hautmont concessions were acquired by the Mons to Hautmont & St. Ghislain Railway Company which came into being on February 9, 1856. In the same year it obtained concessions for an extension joining the St. Ghislain system to the Mons—Hautmont line at Frameries, and bought the short Thulin and Elouges private line. The system thus comprised the following sections:—

Mons to the French frontier	16 km. (including running powers over 1 km. of the State Railways into Mons).
Frontier to Hautmont; branch to Maubeuge	18 km.
Frameries branch	7 km.
Frameries branch	20 km.
St. Ghislain system	61 km.

strife which was fought between the Bassins Houillers group and the Belgian and French main-line companies and which ended disastrously for the former. The greater part of the Mons—Hautmont line rises steadily till the frontier; over 2.4 miles the gradient reaches 1 in 96.

The Nord-Belge

The Nord had thus acquired working leases of the under-mentioned lines:—

		km.	Miles
1854	Charleroi & French Frontier Railway Company	30.0	18.6
1855	Namur & Liège and Mons—Manage Railway Company	73.0	45.4
	Namur-Givet Line (opened 1863)	46.0	28.6
1858	Mons to Hautmont & St. Ghislain Railway Company	61.0	37.9
Total		210.0	130.5

This mileage was twice reduced, in 1859 by 18 km. (11.2 miles), resulting from the sale to the Nord of the French portion of the Mons—Hautmont line, and again in 1866 by 22 km. (13.7 miles), when the St. Ghislain section of the same railway was sold. These sales brought the mileage down to its present total of 170 km. (104.6

Omnibus train from Givet entering Namur, hauled by four-cylinder compound 4-6-0 locomotive, Nord-Belge Railway. The train consists of French Nord vehicles of that company's latest all-steel construction



miles). No more alterations took place until 1875. At that time the Société Générale d'Exploitation des Chemins de Fer, whose system had grown to be larger than that of the State Railways, had become fiercely competitive, and various foreign interests had been endeavouring to secure control of some of the Belgian railway companies. The Nord found it advisable to consolidate its strategic position so as to be able to protect itself against the competition of the Est *via* Givet and against the State Railways, which held the key of the Nord Company's Paris—Charleroi—Liège line (through its ownership of the Charleroi—Namur section). This the Nord was able to achieve through the hold it obtained on the Compagnie du Chemin de fer de Chimay. This small independent railway lies in the south of the province of Namur. It was conceded in 1856 to the Prince of Chimay who transferred his rights to a company of which he became Chairman. The original line ran from Mariembourg through Chimay to the French frontier near Anor. In 1862 the company took over an extension from Mariembourg eastward to Hastière, a Meuse station of the Namur—Givet railway, which brought the total length up to 61 km. (38 miles). The first portion was opened to traffic in 1858-59; the second, in 1864-66. The short 5.9-km. section (3.7 miles) lying in French territory beyond the frontier (at Momignies) to Anor, was operated for the Nord by the Chimay Railway Company.

Chimay Railway Construction

Construction of the Chimay Railway was costly and it was difficult to work because of its severe gradients. It climbs most of the way from the Meuse banks to Seloignes at km. 53 (33rd milepost), rising from 102 to 285 m. above sea-level by 18 km. (11 miles) of gradients of 1 in 110/100. The hopes of the promoters that the line would become part of an international German—Belgian—French route were not realised. As a small

isolated company it could do little, and its operating conditions were unfavourable. Financial troubles arose, and in 1871 the company was unable to meet its liabilities. The Nord saw how useful such a line could be to its own interests, for it filled the gap in an all-Nord route between Paris, Namur, and Liège, whereas the route through Erquennes had to take the interests of the State Railways into account. Besides this, the Nord could divert the Liège—Namur—Dinant traffic away from Givet on to the Chimay line and so on to its own system *via* Anor—Laon and Soissons. On the other hand, however, there was a difficulty because no transfer of a concession was allowed any longer without Government approval, and as such consent was uncertain some other means had to be found to do without it.

This was embodied in a contract drawn up in 1875 between the Nord and the Chimay Railway Companies whereby the Chimay Company agreed to work its own lines in compliance with the rulings of the Nord and not to undertake any expenditure without the agreement of the Nord. In exchange, the Nord undertook to help in building up traffic, to pay an annual subvention of fr.51,000 and to guarantee that net receipts should not be less than 45 per cent. of gross earnings, amounts which have been adjusted from time to time. Henceforward either the Nord or the Nord-Belge provided most of the rolling stock, such as Engerth locomotives, two of which came from the former company and one from the latter. Traffic was satisfactory for quite a time but afterwards fell off owing to changed conditions on the rest of the system and to the opening of new lines. It has, however, improved in recent years as the line provides the shortest route to Germany *via* Namur, Liège, the Liège-Vise line as far as Montzen and so to the German frontier.

(To be continued)

Learning by Question and Answer

The catechism form of instruction, once popular in some circles in this country, has been much favoured in railway educational work in Germany, and before the last war there were several catechisms available on quite a variety of subjects. The best known, we believe, were those written by a former Prussian official, E. Schubert, which dealt with a guard's duties, a signalman's work, a platelayer's duties, &c., and were well illustrated.

Schubert's catechisms went through many editions—our platelayer's copy is from the 14th—and other writers adopted the idea. Just before the present war one technical journal had begun publishing a very good series of questions and answers on telephone engineering and its railway applications. Opinions differ as to the value of this particular method of impressing facts and principles on the mind, and undoubtedly some persons can learn with its aid much better than others.

HOPPER BALLAST WAGONS

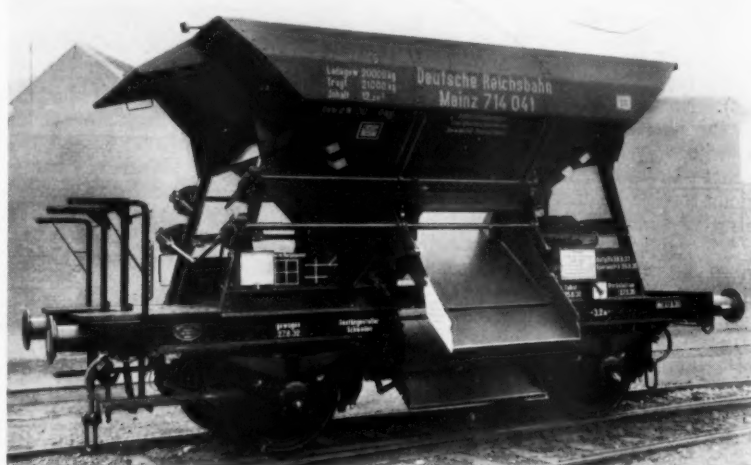
Typical modern ballast wagons in use on Continental railways

THE extensive programmes of permanent way improvements carried out by most railways during the last couple of decades have been made practicable by the development of many labour-saving devices. Among these are hopper ballast wagons of which we illustrate two types largely used on the Continent. The first shows a 20-ton four-wheel wagon of the Talbot type, as used on the German State Railway. It has a capacity of 12.5 cu. metres (441 cu. ft.), and weighs empty, with Kunze-Knorr compressed-air brake (eight blocks) and hand brake about 10 tons 15 cwt. The overall height is about 11 ft. 6 in. and, as shown diagrammatically, the arrangement of the dumping chutes and doors is such as to enable ballast to be unloaded at various positions along the track. There are large and small discharge openings at both sides, controlled independently by rotary shutters of the cylindrical segment type. Beneath the larger bottom opening there are inclined chutes or dumping plates with adjustable extension pieces which enable ballast to be deposited close up to the rails or at a variable distance therefrom. By opening gates in the upper part of these chutes, ballast can be dumped between the rails. In order that material can be deposited between and outside the rails simultaneously, the centre-dumping gates are sub-divided in their length; thus, by opening the side shutters and one or more divisions of the centre gates some of the ballast flows through the latter on to the permanent way between the rails, while the rest of the material passes outside the track. The smaller openings, about one-third of the way up each side of the hopper, discharge on to chutes delivering the material a considerable distance away from the rails, the actual distance being again regulated by means of the adjustable extension pieces on the chutes.

The control of the various shutters and the adjustment of the chutes are effected easily by hand from the end

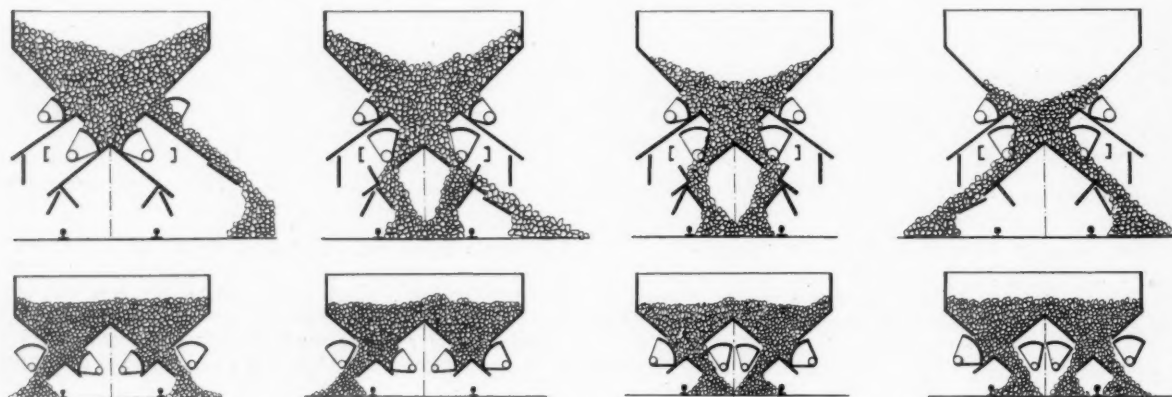
platform of the wagon, where the brake controls are also situated. The rotary shutters are opened and closed simply by moving the appropriate hand lever forwards or backwards. Each gate is held automatically at the desired opening by a device which releases it automatically directly the control lever is pulled to close the opening. It is thus possible to dump material only where it is required, and this can be done while the ballast train moves slowly forwards.

This high-built type of wagon is suitable for use only



Talbot type of hopper ballast wagon as used on the German State Railway

where mechanical loading equipment is available. For loading by hand, a lower type of body is to be preferred. This necessitates a double hopper construction in order to provide all the desired possibilities of unloading. The wagons may conveniently be used in pairs connected by a short coupling, as shown in the second picture, thus forming a double wagon of about 20 cu. metres (706 cu. ft.) capacity, capable of carrying about 30 tons of ballast. The load can be increased to 40 tons if local con-



Ballast unloading possibilities with (above) Talbot type of hopper wagon, and (below) hand-loading type of hopper wagon



Twin hopper ballast wagons as used on the Bulgarian State Railways

ditions permit the height of the wagon to be increased by about 10 in. For separate use, carrying 15 or 20 tons each, the wagons are fitted with standard buffer and draw-gear at both ends. The double wagon illustrated is 5 ft. 9 in. high, and typical unloading possibilities are shown diagrammatically. The two hoppers discharge on to the ridge of right and left chutes as shown, the openings being controlled by four rotary shutters. The outside shutters can be operated independently, but the inside

shutters, controlling the delivery between the rails, are mechanically coupled so that they open or close simultaneously. The shutters are operated by levers accessible from the end platforms of the wagons and, in the case of double wagons, the platforms are connected by a gangway so that one man can attend to both wagons. The tare weight of a double wagon is about 19 tons, one wagon being fitted with compressed-air and hand brakes and the other with air pipes only.

Locomotive Performance in Norway

(See article on page 132)



Oslo—Trondheim express, Norwegian State Railways, hauled by one of the 2-8-4 "Dovrebuggen" 4-cylinder compound locomotives

THE BENGAL DOOARS RAILWAY

In accordance with terms of contract, the Governor General of India is exercising his right to purchase the original line and extensions on December 31, 1940

THE directors of the Bengal Dooars Railway Company have received the statutory 12 months' notice of the intention of the Governor General of India to exercise his right to purchase the company's railway, its extensions, plant, buildings, stores, rolling stock, and everything connected with it, on December 31, 1940. The total length of line operated by the company is 160½ miles, namely, the original line of 39½ miles, and extensions 121½ miles in length, all of metre gauge. It serves a tea-planting area ranged along the foot of the Himalayas in Northern Bengal, and connects with the Assam main line of the Eastern Bengal Railway at Lalmanirhat junction. The track is of 50-lb. and 41½-lb. flat-bottom rails, laid on sal-wood sleepers, and—with one small exception—is stone-ballasted throughout. It is unfenced and the ruling

gradient is 1 in 150 on the original line, and 1 in 100 on the eastern and western extensions; the sharpest curve is 1,432 ft. rad. On the 5-mile Chalsa junction—Metelli section, however, which alone is sand ballasted, there are 1 in 40 grades and 800-ft. rad. curves. The latest available returns show that the rolling stock consists of 19 locomotives, 72 carriages, and 458 wagons.

The offices of the company are at 210, Gresham House, Old Broad Street, London, E.C.2, and the Chairman is Mr. G. Anson Bayley. Issued capital amounts to £760,000, of which £400,000 is in ordinary stock, and the remaining £360,000 in 4 per cent. preference stock. Under the terms of the company's original agreement, the Secretary of State for India had the option of purchase on December 31, 1919, or at the end of any succeeding seventh year, and this option is now vested by law in the Governor General of India in Council. The price to be paid for the original line is 1½ of the amount of the invested capital liabilities of the company; and that for the eastern, southern, and western extensions a sterling sum equal to 25 years' purchase of the average of the net earnings of those extensions during the last preceding 5 years, provided that the amount does not exceed by more than 20 per cent. nor is less than the total approved capital expenditure incurred with the sanction of the Government. The company was registered on July 30, 1891, the first sections of line were opened in 1893, and the twelve extensions were brought into use at various dates between 1900 and 1931. This small system will, presumably, be absorbed by the Eastern Bengal (State) Railway in 1941.

Company's Notice to Stockholders

The following letter, dated January 16, has been addressed to the stockholders by the company:—

"This company's railway was constructed and is maintained upon the terms and conditions contained in certain contracts entered into with the Secretary of State for India in Council, and the benefits and rights of the Secretary of State under those contracts have now become vested by law in the Governor General of India in Council. Those contracts confer on the Governor General of India the right of purchasing the railway, with the plant, buildings, stores, rolling stock and everything connected therewith.

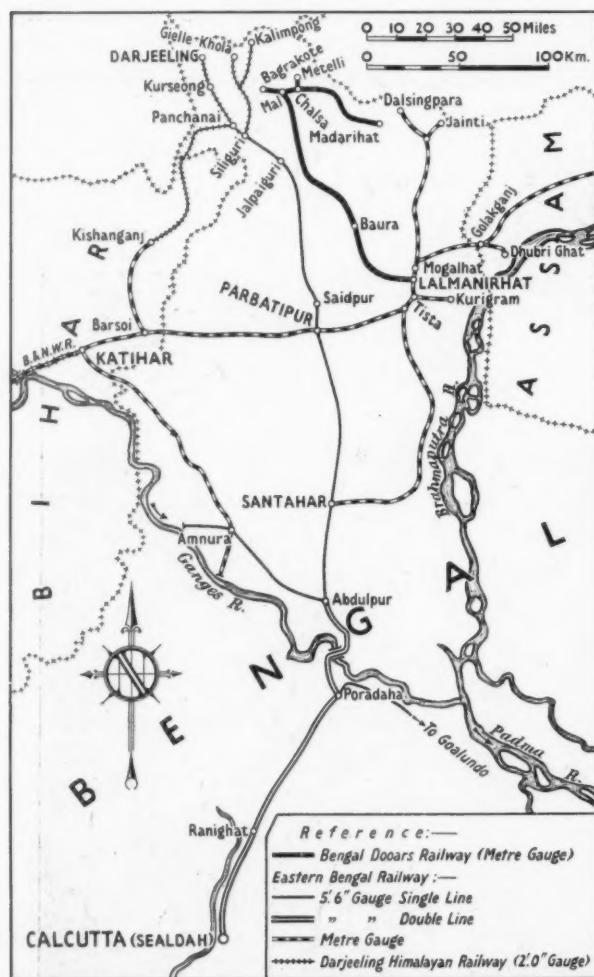
"Notice has been given to the company of the intention of the Governor General of India to make such purchase on December 31, 1940, and accordingly possession of the railway will then have to be given up to the Governor General of India, who on that date will become absolute owner thereof.

"The price receivable by the company on the purchase will be computed in the manner set out in the contracts and will be payable in sterling within three months from December 31, 1940, with interest thereon at 6 per cent. per annum from that date. As the price is to be computed partly with reference to average net yearly earnings up to that date, it is not practicable at present to state what it will amount to.

"The purchase will bring to an end the business of the company, and therefore when it takes effect the company will be wound up. An extraordinary general meeting to pass the resolution requisite for the winding up will be convened in due course. In the meantime the railway will continue to be operated by the company as heretofore.

Yours faithfully,

F. J. HORNE,
Secretary."



Sketch map showing the position of the Bengal Dooars Railway relative to Eastern Bengal and other systems. The Himalayas run along just to the north of the boundary shown above Darjeeling and the Bengal Dooars line to Madarihat



Finnish Railway Scenes

Left: The Russo-Finnish frontier station near Terijoki. The bridge shown is on the actual frontier; the white-painted part is Finnish and the far end, painted red, Russian

Right: A Finnish Red Cross train in the station at Viipuri, one of the Baltic ports which has lately been bombed and bombarded

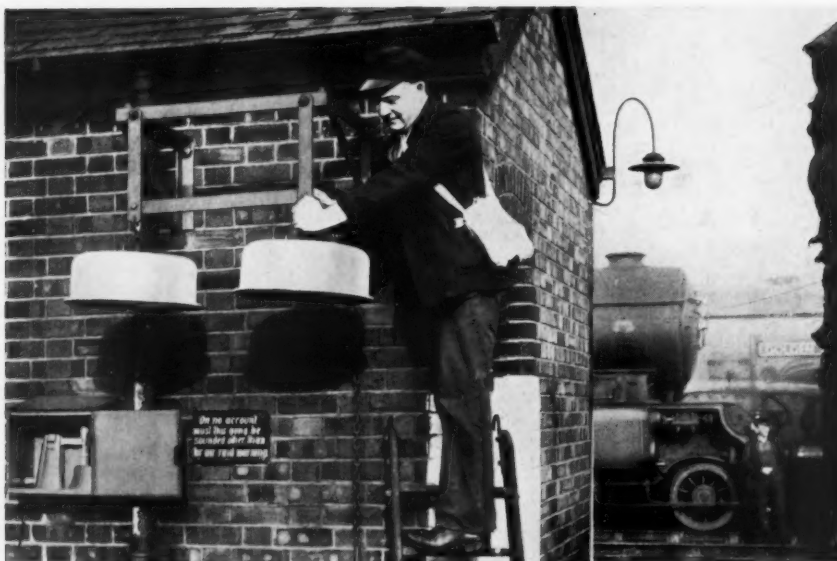


Finnish travelling field post office. Letters and parcels may be sent unstamped to Finnish soldiers and are sorted in these vehicles



Corridor of a second class day coach on the Finnish State Railways

British Railways and the War—4



A.R.P. gongs with high-pitched note for giving air raid warning in a locomotive yard



Screened light throwing a beam on a booking office window



Fitting code sign on a locomotive of a troop train

RAILWAY NEWS SECTION

PERSONAL

Sir Andrew Duncan, G.B.E., President of the Board of Trade, has appointed Mr. M. S. McCorquodale, M.P., to be his Parliamentary Private Secretary (unpaid).

Mr. Kenneth E. Garcke has been appointed a Director of the Antrim Electricity Supply Company, and the Antrim Electricity Distribution Company. He is now on the boards of all the subsidiary companies of the B.E.T. Electricity Supply Co. Ltd.

Notice is given in *The London Gazette* of January 12 of a dissolution of partnership in the case of the firm of Messrs. Bischoff, Cox & Co., Solicitors to the Great Western of Brazil and the Paraguay Central Railway Companies. Mr. Philip Henry Cox retires from the firm, and Messrs. T. H. Bischoff, G. H. E. Inchbald, R. B. Popkiss, and B. C. Bischoff will continue to carry on business in partnership under the style or firm of Bischoff & Co.

Changes in membership of the firm of Messrs. Norton, Rose, Greenwell & Co., Solicitors to the Central Argentine Railway Limited, are announced in *The London Gazette* of January 5. Mr. Walter Percy Norton and Mr. Lewis Henry Grundy are retiring from the firm, which will continue to carry on business in partnership under the same style or firm of Norton, Rose, Greenwell & Co., and will consist of Messrs. W. Charles Norton, Fredk. Johnson, P. M. Armitage, and Conyers A. Surtees.

M. Jonas Masiliunas is the new Minister of Transport in the Lithuanian Cabinet which was formed after the resignation on November 21 of the former Council of Ministers.

Mr. John H. Taylor, M.Inst.C.E., Chief Assistant to the Chief Engineer, Central Argentine Railway, returned to Buenos Aires on December 4 from leave of absence in Europe.

Mr. William Macgill, who for 27 years has been Manager of the Stirling section of railway bookstalls owned by J. Menzies & Co. Ltd., has retired.

Mr. Henry Dow, Passenger Clerk, Dalmeny, L.N.E.R., has been appointed Stationmaster (acting) at Kirkliston.

Sir Mahmoud M. Shakir Pasha, K.B.E., resigned from the position of General Manager of the Egyptian State Railways, Telegraphs, & Telephones on December 26 last, and was succeeded by Tarraf Aly Bey, Under Secretary of State for Communications.

Tarraf Aly Bey, who holds the Diploma of the Ecole Centrale de Paris, first

doubt that his great energy and experience, both practical and technical, will assure for him the success that he has hitherto enjoyed.

Mahmoud Tewfik Ahmed Bey, Chief Engineer of the Egyptian State Railways, has been appointed Under Secretary of State for Communications in succession to Tarraf Aly Bey.

Captain William Hayden has retired from the position of Dockmaster, Swansea, G.W.R., after 15 years of service.

Mr. Benjamin Irving, whose death we announced at page 587 of our issue of November 3, has left estate valued at £11,397 (net £11,302). Mr. Irving was Chairman of Andrew Barclay, Sons & Co. Ltd., and was formerly Managing Director of Sir W. G. Armstrong, Whitworth & Co. (Engineers) Ltd.

M. Xavier Neujean, Burgomaster of Liège, Belgium, and Minister of State, has died at the age of 75. He was at one time Minister of Transport in the Belgian Cabinet.

INDIAN WAGON TURN-ROUND COMMITTEE

Mr. B. Moody, V.D., Chief Operating Superintendent, North Western Railway of India, has been appointed by the Railway Board as Chairman of a new whole-time committee to study and report upon the important subject of wagon turn-round on the broad-gauge railways. The other members of this committee are: Mr. J. B. Remington, Divisional Transportation Superintendent, G.I.P.R.; Mr. G. Faruque, Coal Manager, B.-N.R.; and Mr. P. N. H. Baker, Transportation Superintendent (Power), E.I.R.

A presentation was made to Mr. Thomas Johnstone, on December 28, to mark his retirement. Mr. Johnstone was District Goods & Passenger Manager, Inverness, L.M.S.R.

Mr. John Williamson Lewis, Chief Engineer, Way & Works, Federated Malay States, has retired from this position. He was born in 1887, and educated at King's School, Canterbury, and the Crystal Palace School of Engineering. In 1908 he became Extra Assistant Engineer, Chief Engineer's Office, Surrey Commercial Docks, London. He went to Malaya in May, 1909, on his appointment as Junior Assistant Engineer, F.M.S. Railways,



H.E. Tarraf Aly Bey

Appointed General Manager, Egyptian State Railways, Telegraphs, & Telephones

entered Government Service in 1925 as Chief Inspector of the Mechanical & Electrical Section of the Ministry of Public Works. In 1926 he was elected Member of Parliament for Minya Mudi-rieh. In 1928 he was appointed Director of the Mechanical & Electrical Section of the Ministry of Public Works, and in 1930 was transferred to the Ministry of the Interior, where he filled the important position of Director of the Service of Municipalities and Local Commissions. Tarraf Aly Bey was appointed Under Secretary of State for Communications under the premiership of Mohamed Mahmoud Pasha. The position to which he has now been appointed ranks as one of the most important in the State, and in view of his past record, there is little



Mr J. W. Lewis

Chief Engineer, Way & Works, Federated Malay States Railway, 1937-1939

and was employed on railway surveys and construction. Becoming Assistant Engineer in January, 1912, he was engaged on special service works in Kuala Lumpur. Mr. Lewis was given charge of a district of the F.M.S. Railways as District Engineer in March, 1913, and in November, 1923, was promoted Senior District Engineer and

attached to Head Office. From June, 1931, to March, 1932, he acted as Engineer for Way and Works, and in August, 1932, was appointed Maintenance & New Works Engineer. Mr. Lewis acted as Chief Engineer, Way & Works, from October, 1934, to June, 1935, and was permanently appointed to that position in August, 1937. Mr. Lewis is an Associate Member of the Institution of Civil Engineers.

Mr. Stamford Elmore McLewin, Honorary Secretary of the Permanent Way Institution, is retiring at the end of January. Mr. McLewin, who was educated at Enfield Grammar School and at Latymer College, began his railway career when he joined the staff of the Signal Department of the London Chatham & Dover Railway in 1886. He was appointed inspector on the London Division in 1897, and it may be of interest to record here that the London Division at this period included Victoria and Holborn to Ashford (Kent), to Rochester Bridge, and to Gravesend West Street; the L.C. & D.R. Metropolitan system from Victoria to Snow Hill; and the Greenwich, Crystal Palace, and Catford Loop branches. In 1913 he was transferred to the Faversham Division, S.E. & C.R., and retired from the service of the Southern Railway in 1929. Mr. McLewin began his official connection with the Permanent Way Institution in 1897 when he was elected Honorary Secretary. He has



Mr. Stamford E. McLewin

Honorary Secretary, Permanent Way Institution, 1897-1940

therefore the proud distinction of having held office for 42 years. Mr. McLewin is being succeeded by Mr. H. Janes who, for the past four years, has been Assistant Honorary Secretary.

The vacancy on the board of Bassett-Lowke Limited caused by the death of Captain A. B. Lockhart, D.S.C.,



The railway station at Ankara with the offices of the Turkish State Railway administration on the left. The buildings in the background are part of the housing extension undertaken since 1924, and among them are several industrial and administrative constructions

R.N., which we recorded in our issue of January 5, has now been filled by Mr. R. Bindon Blood. Mr. Bindon Blood is at the present time Managing Director of Winteringham Limited of Northampton, the company producing the bulk of the locomotives and rolling stock sold by Bassett-Lowke Limited.

Mr. Walter S. Thompson, who, as announced in our issue of December 29, was appointed Director of the Bureau of Information, Dominion of Canada, Ottawa, has resigned owing to ill-health. Mr. Thompson is Director of Publicity for the Canadian National Railways and Trans-Canada Air Lines.

Sir Bernard Dudley F. Docker has been elected to succeed his father, Mr. F. Dudley Docker, as President of the Midland Council of the National Union of Manufacturers. The latter had occupied the presidency for the past 23 years. Sir Bernard is Chairman of the Birmingham Small Arms Company and the Birmingham Railway Carriage & Wagon Co. Ltd., and a Director of the Midland Bank Limited.

Mr. W. Davin has been promoted from the position of Piermaster at Dun Laoghaire (Kingstown) to be Station Controller at North Wall depot, Dublin, L.M.S.R. Mr. Davin, who joined the L.N.W.R. in Dublin 33 years ago as a clerk, is well known in Parliamentary and labour Executive circles, and is a T.D. (i.e., Member of Parliament) for Leix and Offaly.

Mr. E. Rawdon Smith, Public Relations Officer to the British Overseas Airways Corporation, has been seconded to the Dominions Office for public relations duties. He is retaining his position with British Overseas Airways Corporation. Mr. Rawdon Smith was Public Relations Officer to the London Passenger Transport Board from 1935 to 1939.

We regret to record the death of Mr. Bernard Cooke who was at one time Assistant Superintendent at Crewe signal works, L.M.S.R. Mr. Cooke began his railway career with the Midland Railway and worked in the Signals Department, eventually becoming Works Manager. After the railway amalgamation in 1923, Mr. Cooke became Works Manager and Assistant Superintendent at Crewe, but retired some years ago.

Sir David R. Llewellyn, Bart., Deputy Chairman, has been elected Chairman, and Mr. S. R. Beale (Chairman of Guest, Keen & Nettlefolds, Limited), has been elected Deputy-Chairman of John Ly-saght Limited.

Mr. R. P. Beddow has been appointed Secretary to the British Electric Traction Co. Ltd., to fill the vacancy caused by the recent retirement of Mr. Thomas Bower.

Government and G.W.R. Dividends

Company's reply to Minister

The delay in arriving at agreement upon the financial arrangement between the railways and the Government for the period of control has continued, and the anxiety and confusion which has existed on the subject was increased for a while by the mis-reporting in the lay press of a statement by the Minister of Transport. As was briefly reported in THE RAILWAY GAZETTE last week, Captain Euan Wallace in reply to Questions in the House of Commons on January 17 stated that he knew no reason why the G.W.R. should postpone payment of dividends on its "pre-ordinary stocks." The omission of the prefix "pre-" by the reports in the daily press detracted considerably from the implications of the Minister's statement. Below we reproduce in full the Questions and Answers in Parliament and also the reply which the Great Western Railway issued on the next day.

Mr. D. L. Lipson (Cheltenham—Ind.) asked the Minister of Transport if he could now state if an agreement had been arrived at with the railway companies; and, if so, on what terms.

Captain Wallace: The negotiations with the railway companies involve a number of highly complicated questions, and I am not yet in a position to state that agreement has been reached.

Mr. Lipson: Why is it that negotiations this time are taking so long, seeing that in the last war agreements were arrived at within two months; and in view of the hardships caused to a great many people by the delay in coming to a decision, can the Minister give a definite date by which a decision will be announced?

Captain Wallace: The reason why negotiations have been longer is that I think we are proceeding on a more sensible basis. The hon. member must remember that the agreement made in the last war left the British taxpayers with a bill of £60,000,000.

Mr. Lipson: Does not the Minister agree that negotiating on a sensible basis ought to produce results more quickly?

Captain Wallace: I do not agree that it necessarily does. As to the question about hardships to people concerned, I do not know of any case of hardship which has arisen as a result of these negotiations not being completed.

Mr. R. De La Bere (Evesham—C.): Is Lord Stamp in charge of these negotiations?

Sir Henry Morris-Jones (Denbigh—Lib. Nat.): Is it not the case that these negotiations were going on for eighteen months previous to the war, and in view of the distress which has been caused to widows and orphans and other people, arising from the withholding of dividends by the rail-

way companies, cannot the Minister take steps to expedite a decision?

Captain Wallace: These statements about distress caused to widows and orphans have no foundation whatever. I know no reason why the Great Western Railway Company should postpone payment of dividends on its pre-ordinary stocks.

Mr. Charles Brown (Mansfield—Lab.): Does not the Minister think it would be better to nationalise the railways straight away?

There was no reply.

On the next day the Great Western Railway issued the following statement:—

"The attention of the company has been drawn to the answer of the Minister of Transport as reported in Hansard of January 17 that he knew no reason why the Great Western Railway should postpone payment of dividends on its pre-ordinary stocks. Amongst the large number of the company's stockholders this statement must create a sense of grievance against the directors, and if it were justified would give rise to protest against their action.

"The company is prevented by general Statute applying to all railways from declaring dividends until the accounts have been certified by the auditors, and this applies to the consolidated guaranteed, consolidated preference, and redeemable preference stocks, as well as to the ordinary stocks, and affects altogether about 90,000 holders. The dividends on these stocks are paid on the authority of resolutions of the stockholders passed at the annual meeting after they have approved the accounts. By the Statutes applying to the Great Western Railway Company, the annual meeting must be held in February. Moreover, the directors must be satisfied that they will be in a position to submit the accounts to their stockholders at the annual meeting on February 28 before instructions can be given for the balances to be struck in the stock registers. These balances would ordinarily have been struck on January 24 and the public notice issued on January 16 to ensure the payment of the dividends on their normal dates.

"It is not practicable to complete the accounts for the year on any reliable basis until the main terms of compensation have been settled with the Government. If a settlement is not reached quickly there will be no alternative but to assume a basis of compensation and complete the accounts by including a hypothetical figure of net revenue for the control period to December 31, 1939. The adoption of such a course would be obviously undesirable if it can be avoided by a short delay in the payment of dividends."

TRANSPORT SERVICES AND THE WAR—22

The progress of carriage lighting—A warning to passengers—Improved train services next Thursday—Military traffic in Australia—Development of wartime railway traffic in France

Wartime has been responsible for many changes in the daily routine of city dwellers. The railways are operating more than 80 per cent. of the pre-war total of London suburban business services and are constantly reviewing the changing needs of suburban passengers. Although since the outbreak of hostilities many business houses have been evacuated from London, those who remain are for the most part keeping to normal hours of beginning business in the morning and, whilst there has been a slight reduction in the number of suburban passengers travelling during the rush hours, the extent of the reduction is very small and there is

SPECIAL NOTICE

Message to Passengers

Passengers are advised that in their own interests they should co-operate in drawing and keeping drawn blinds and curtains in trains, during the hours of darkness, and see that they are drawn when alighting, otherwise, it may be necessary to discontinue the improved lighting.

Special notice posted at Euston station last week. Similar action has been taken elsewhere on the British railways

stated to be no perceptible diminution in volume. The reversion from Summer to Greenwich time has caused a shifting of the peak hours; the morning peak is now shorter, as it has closed up from 7.30 a.m.-9.30 a.m. to approximately 7.30 a.m.-9 a.m. The duration of 1½ hours instead of 2 hours has caused a greater concentration of passengers. The evening rush hour has become earlier, i.e., 4 p.m.-6 p.m. instead of 5 p.m.-7 p.m., and additional earlier homeward-bound trains are being run to meet this change. The evacuation of business houses to suburban and outer-suburban areas has also necessitated the augmentation and revision of services at peak hours against the normal flow into and out of the city. Many factories and works in the suburban areas which formerly worked a normal day are now working shifts making up 24 hours, and this has given rise to demands for services at unusual times.

Many of the trains equipped with new lighting systems are being delayed because some passengers leave blinds improperly drawn. The railways have recently issued an appeal to the travelling public to co-operate, and a warning that if passengers became careless of the regulations the authorities might order the railways to withdraw all improved lighting. The official statement of the Railway Executive Committee says: "Every night dozens of trains have to be stopped at signal boxes because a blind half drawn is casting a bright beam that can be seen for miles. This causes delay not only to the offending train but to all others that come after it. Careless passengers have only themselves to blame for these delays, for which unfortunately the conscientious traveller who carefully adjusts the blinds has also to suffer by arriving late. If this indifference to safety regulations continues to increase, it is likely to cause the authorities who gave permission for reading lights to be installed in trains on the strict understanding that all lights would be kept screened throughout the blackout, to withdraw this permission. This would mean a return to the dim blue lighting of the beginning of the war, just when the railways are approaching the time when all their trains will be equipped with the new lighting. Trains are being equipped as fast as possible but it is not expected that the installation will be completed before March, as in all more than 42,000 individual carriages have to be fitted with the special lights."

Meanwhile, improved lighting in railway carriages is now being installed at the rate of nearly 10,000 compartments a week. Some 76,284 individual compartments have been fitted with improved lighting, and 207,057 have still to be equipped. On the L.N.E.R., reading lighting has now been fitted in 1,002 coaches, providing a total of 7,120 compartments. Those equipped include many working on the London suburban lines, on the East Coast and East Anglian main lines, on the Cheshire Lines between Manchester and Liverpool, and on lines in the Scottish Area. In addition, over 755 L.N.E.R. end door main-line corridor coaches have been equipped with full white lighting, giving a total of 73 complete trains. Individual figures for the other main-line railways have been recorded in these columns from time to time.

Home Office approval has now been received to the form of reading light which, since early December, has been in operation experimentally on certain sections of the Southern Railway suburban system. The Southern Railway wishes to point out, however, that the number of compartments to

DEFENCE OF THE REALM REGULATIONS

In view of possible attack by hostile aircraft, it is necessary that the blinds in the carriages of all trains should be kept down after sunset.

Extract from the Order made by the Secretary of State for the Home Department:—

"(7) Passengers in Railway Carriages which are provided with blinds must keep the blinds lowered so as to cover the windows.

"The blinds may be lifted in case of necessity when the train is at a standstill at a station, but, if lifted, they must be lowered again when the train starts."

Heavy penalties are provided for any infringement of this Order.

DEFENCE OF THE REALM REGULATIONS

LIGHTS IN CARRIAGES.

The Order that "Passengers in Railway Carriages which are provided with blinds must keep the blinds lowered so as to cover the windows" is cancelled.

The lights in the carriages will be extinguished in case of a threatened attack by hostile aircraft, and thereafter no lights may be exhibited by passengers.

30.5.17.

Lighting instructions posted in compartments in 1915—1917. The left-hand notice, which, it will be seen, had Statutory force and penalties attached, was issued in December, 1915. The cancellation is dated March 30, 1917

be fitted is over 30,000 and that not only has the equipment to be manufactured and fitted, but only a limited amount of rolling stock can be withdrawn from service day by day for the changeover to be made. The conversion of the whole of the rolling stock concerned will take about three months.

London Transport Train Lighting

The first tube train equipped with the new reading lights approved by the Ministry of Transport, the Ministry of Home Security, and the Air Ministry, for use on open section of line was placed in service on January 15, as we recorded briefly last week. Earlier in the day it was shown to the press by Mr. Alex. J. Webb, Outdoor Superintendent (Railways) and Mr. W. P. N. Edwards, Joint Public Relations Officer, London Passenger Transport Board. When the programme has been completed, reading lights will be provided in all London Transport trains except during an air raid, when the emergency subdued lighting will be employed. Nearly all trains will have full peacetime lighting when they are in tunnel. The programme in detail is: 3,764 saloon type cars (that is, all tube cars, all District Line cars and most Metropolitan Line cars) will have full peacetime lighting in tunnel, shaded reading lights on open sections of line, and subdued lighting during air raids; 477 Metropolitan Line compartment coaches and saloon cars will have reading lights all the time except during air raids; 90 Inner Circle cars will have full peacetime lighting in tunnel and subdued lighting on the open sections of line. The lighting will be controlled by the guard from a central switch. All the long-distance trains on the Metropolitan Line have already been fitted with reading lights, and now that the manufacturers have begun to deliver the material in quantity, 40 trains a week will be equipped with the new shades and wiring. The material required includes 30,000 additional lamps, 15,000 steel box shades weighing in all 20 tons, and 160 miles of wire.

Visits to Evacuees

Arrangements have now been made for railway facilities at special cheap rates to be available for visitors to evacuees to places west of Exeter and Taunton to which the return journey cannot be made in one day. Until further notice, these facilities will be available on any weekend to persons holding vouchers. The outward journey will be made at mid-day on the Saturday and the return journey either on Sunday afternoon or by a night train (if available) on Sunday night, at the option of the visitor. Vouchers must be obtained at least a week in advance of the date of the journey. Residents in London should apply at the London Divisional Education Offices; residents in the neighbouring boroughs and urban districts should apply at the Town Hall or Council Offices. Applicants will be required to satisfy the voucher-issuing officers that they have arranged for overnight accommodation in the reception areas.

Improved Train Services from February 1

Train service improvements announced by the L.M.S.R. as effective from February 1 include first class sleeping accommodation on the 10.50 p.m. from Euston to Preston, in which passengers will be allowed to remain in their berths at Preston until 7.30 a.m.; and on the 8.35 p.m. from Carlisle to Euston, from Preston onwards. The through North Wales portion on the 10.30 a.m. from Euston is extended to Holyhead. Restaurant cars are to be attached to the 9.10 a.m. from Liverpool to Plymouth and the 8.40 a.m. Plymouth to Liverpool (from February 5), and buffet cars to the 11 a.m. and 3.45 p.m. from Liverpool (Lime Street) to Hull and the 9 a.m. and 4 p.m. from Hull to Liverpool. Large numbers of train alterations are announced to take place from February 5 between Shrewsbury and Hereford, Shrewsbury and Welshpool, Shrewsbury and Wellington, Shrewsbury and Minsterley, Chester and Birkenhead, Hooton and West Kirby, and over various other lines worked by the L.M.S. and G.W. Railways jointly or in connection with one another; this arises from the new timetable which is being brought into operation by the G.W.R. on February 5. Numerous additional local trains are included in the February alterations over all parts of the L.M.S.R. system. On the

Southern Railway, from February 1, restaurant cars will run on the 1.30 p.m. from Waterloo to Bournemouth West (an express restored to the timetable on January 1); the 2.50 p.m. from Waterloo to Exeter; and the 8.20 a.m. from Bournemouth West to Waterloo, now running daily. The 6.5 p.m. from Bournemouth West to Waterloo, previously announced as running daily, is running on Fridays, Saturdays, and Sundays only, and has a restaurant car on Sundays only. Restaurant cars are also now included in

TRAIN SERVICE

LEEDS, WETHERBY, HARROGATE & CHURCH FENTON

4th DECEMBER, 1939, until further notice

LEEDS		WEEKDAYS									
City	dep	7.30	7.45	8.00	8.15	8.30	8.45	9.00	9.15	9.30	9.45
Harrogate	arr	7.45	8.00	8.15	8.30	8.45	9.00	9.15	9.30	9.45	10.00
Wetherby	arr	7.55	8.10	8.25	8.40	8.55	9.10	9.25	9.40	9.55	10.10
Church Fenton	arr	8.05	8.20	8.35	8.50	9.05	9.20	9.35	9.50	10.05	10.20
Harrogate	dep	8.15	8.30	8.45	9.00	9.15	9.30	9.45	10.00	10.15	10.30
Wetherby	dep	8.25	8.40	8.55	9.10	9.25	9.40	9.55	10.10	10.25	10.40
LEEDS City	dep	8.35	8.50	9.05	9.20	9.35	9.50	10.05	10.20	10.35	10.50
Church Fenton	dep	8.45	9.00	9.15	9.30	9.45	10.00	10.15	10.30	10.45	11.00
Wetherby	dep	8.55	9.10	9.25	9.40	9.55	10.10	10.25	10.40	10.55	11.10
Harrogate	dep	9.05	9.20	9.35	9.50	10.05	10.20	10.35	10.50	11.05	11.20
LEEDS City	dep	9.15	9.30	9.45	10.00	10.15	10.30	10.45	11.00	11.15	11.30
Church Fenton	dep	9.25	9.40	9.55	10.10	10.25	10.40	10.55	11.10	11.25	11.40
Wetherby	dep	9.35	9.50	10.05	10.20	10.35	10.50	11.05	11.20	11.35	11.50
Harrogate	dep	9.45	10.00	10.15	10.30	10.45	11.00	11.15	11.30	11.45	12.00
LEEDS City	dep	9.55	10.10	10.25	10.40	10.55	11.10	11.25	11.40	11.55	12.10
Church Fenton	dep	10.05	10.20	10.35	10.50	11.05	11.20	11.35	11.50	12.05	12.20
Wetherby	dep	10.15	10.30	10.45	11.00	11.15	11.30	11.45	12.00	12.15	12.30
Harrogate	dep	10.25	10.40	10.55	11.10	11.25	11.40	11.55	12.10	12.25	12.40
LEEDS City	dep	10.35	10.50	11.05	11.20	11.35	11.50	12.05	12.20	12.35	12.50
Church Fenton	dep	10.45	11.00	11.15	11.30	11.45	12.00	12.15	12.30	12.45	13.00
Wetherby	dep	10.55	11.10	11.25	11.40	11.55	12.10	12.25	12.40	12.55	13.10
Harrogate	dep	11.05	11.20	11.35	11.50	12.05	12.20	12.35	12.50	13.05	13.20
LEEDS City	dep	11.15	11.30	11.45	12.00	12.15	12.30	12.45	13.00	13.15	13.30
Church Fenton	dep	11.25	11.40	11.55	12.10	12.25	12.40	12.55	13.10	13.25	13.40
Wetherby	dep	11.35	11.50	12.05	12.20	12.35	12.50	13.05	13.20	13.35	13.50
Harrogate	dep	11.45	12.00	12.15	12.30	12.45	13.00	13.15	13.30	13.45	14.00
LEEDS City	dep	11.55	12.10	12.25	12.40	12.55	13.10	13.25	13.40	13.55	14.10
Church Fenton	dep	12.05	12.20	12.35	12.50	13.05	13.20	13.35	13.50	14.05	14.20
Wetherby	dep	12.15	12.30	12.45	13.00	13.15	13.30	13.45	14.00	14.15	14.30
Harrogate	dep	12.25	12.40	12.55	13.10	13.25	13.40	13.55	14.10	14.25	14.40
LEEDS City	dep	12.35	12.50	13.05	13.20	13.35	13.50	14.05	14.20	14.35	14.50
Church Fenton	dep	12.45	13.00	13.15	13.30	13.45	14.00	14.15	14.30	14.45	15.00
Wetherby	dep	12.55	13.10	13.25	13.40	13.55	14.10	14.25	14.40	14.55	15.10
Harrogate	dep	13.05	13.20	13.35	13.50	14.05	14.20	14.35	14.50	15.05	15.20
LEEDS City	dep	13.15	13.30	13.45	14.00	14.15	14.30	14.45	15.00	15.15	15.30
Church Fenton	dep	13.25	13.40	13.55	14.10	14.25	14.40	14.55	15.10	15.25	15.40
Wetherby	dep	13.35	13.50	14.05	14.20	14.35	14.50	15.05	15.20	15.35	15.50
Harrogate	dep	13.45	14.00	14.15	14.30	14.45	15.00	15.15	15.30	15.45	16.00
LEEDS City	dep	13.55	14.10	14.25	14.40	14.55	15.10	15.25	15.40	15.55	16.10
Church Fenton	dep	14.05	14.20	14.35	14.50	15.05	15.20	15.35	15.50	16.05	16.20
Wetherby	dep	14.15	14.30	14.45	15.00	15.15	15.30	15.45	16.00	16.15	16.30
Harrogate	dep	14.25	14.40	14.55	15.10	15.25	15.40	15.55	16.10	16.25	16.40
LEEDS City	dep	14.35	14.50	15.05	15.20	15.35	15.50	16.05	16.20	16.35	16.50
Church Fenton	dep	14.45	15.00	15.15	15.30	15.45	16.00	16.15	16.30	16.45	17.00
Wetherby	dep	14.55	15.10	15.25	15.40	15.55	16.10	16.25	16.40	16.55	17.10
Harrogate	dep	15.05	15.20	15.35	15.50	16.05	16.20	16.35	16.50	17.05	17.20
LEEDS City	dep	15.15	15.30	15.45	16.00	16.15	16.30	16.45	17.00	17.15	17.30
Church Fenton	dep	15.25	15.40	15.55	16.10	16.25	16.40	16.55	17.10	17.25	17.40
Wetherby	dep	15.35	15.50	16.05	16.20	16.35	16.50	17.05	17.20	17.35	17.50
Harrogate	dep	15.45	16.00	16.15	16.30	16.45	17.00	17.15	17.30	17.45	18.00
LEEDS City	dep	15.55	16.10	16.25	16.40	16.55	17.10	17.25	17.40	17.55	18.10
Church Fenton	dep	16.05	16.20	16.35	16.50	17.05	17.20	17.35	17.50	18.05	18.20
Wetherby	dep	16.15	16.30	16.45	17.00	17.15	17.30	17.45	18.00	18.15	18.30
Harrogate	dep	16.25	16.40	16.55	17.10	17.25	17.40	17.55	18.10	18.25	18.40
LEEDS City	dep	16.35	16.50	17.05	17.20	17.35	17.50	18.05	18.20	18.35	18.50
Church Fenton	dep	16.45	16.60	16.75	16.90	17.05	17.20	17.35	17.50	18.05	18.20
Wetherby	dep	16.55	17.10	17.25	17.40	17.55	18.10	18.25	18.40	18.55	19.10
Harrogate	dep	17.05	17.20	17.35	17.50	18.05	18.20	18.35	18.50	19.05	19.20
LEEDS City	dep	17.15	17.30	17.45	18.00	18.15	18.30	18.45	19.00	19.15	19.30
Church Fenton	dep	17.25	17.40	17.55	18.10	18.25	18.40	18.55	19.10	19.25	19.40
Wetherby	dep	17.35	17.50	18.05	18.20	18.35	18.50	19.05	19.20	19.35	19.50
Harrogate	dep	17.45	18.00	18.15	18.30	18.45	19.00	19.15	19.30	19.45	20.00
LEEDS City	dep	17.55	18.10	18.25	18.40	18.55	19.10	19.25	19.40	19.55	20.10
Church Fenton	dep	18.05	18.20	18.35	18.50	19.05	19.20	19.35	19.50	20.05	20.20
Wetherby	dep	18.15	18.30	18.45	19.00	19.15	19.30	19.45	20.00	20.15	20.30
Harrogate	dep	18.25	18.40	18.55	19.10	19.25	19.40	19.55	20.10	20.25	20.40
LEEDS City	dep	18.35	18.50	19.05	19.20	19.35	19.50	20.05	20.20	20.35	20.50
Church Fenton	dep	18.45	19.00	19.15	19.30	19.45	20.00	20.15	20.30	20.45	21.00
Wetherby	dep	18.55	19.10	19.25	19.40	19.55	20.10	20.25	20.40	20.55	21.10
Harrogate	dep	19.05	19.20	19.35	19.50	20.05	20.20	20.35	20.50	21.05	21.20
LEEDS City	dep	19.15	19.30	19.45	20.00	20.15	20.30	20.45	21.00	21.15	21.30
Church Fenton	dep	19.25	19.40	19.55	20.10	20.25	20.40	20.55	21.10	21.25	21.40
Wetherby	dep	19.35	19.50	20.05	20.20	20.35	20.50	21.05	21.20	21.35	21.50
Harrogate	dep	19.45	20.00	20.15	20.30	20.45	21.00	21.15	21.30	21.45	22.00
LEEDS City	dep	19.55	20.10	20.25	20.40	20.55	21.10	21.25	21.40	21.55	22.10
Church Fenton	dep	20.05	20.20	20.35	20.50	21.05	21.20	21.35	21.50	22.05	22.20
Wetherby	dep	20.15	20.30	20.45	21.00	21.15	21.30	21.45	22.00	22.15	22.30
Harrogate	dep	20.25	20.40	20.55	21.10	21.25	21.40	21.55	22.10	22.25	22.40
LEEDS City	dep	20.35	20.50	21.05	21.20	21.35	21.50	22.05	22.20	22.35	22.50
Church Fenton	dep	20.45	20.60	20.75	20.90	21.05	21.20	21.35	21.50	22.05	22.20
Wetherby	dep	20.55	21.10	21.25	21.40	21.55	22.10	22.25	22.40	22.55	23.10
Harrogate	dep	21.05	21.20	21.35	21.50	22.05	22.20	22.35	22.50	23.05	23.20
LEEDS City	dep	21.15	21.30	21.45	21.60	21.75	21.90	22.05	22.20	22.35	22.50
Church Fenton	dep	21.25	21.40	21.55	22.10	22.25	22.40	22.55	23.10	23.25	23.40
Wetherby	dep	21.35	21.50	22.05	22.20	22.35	22.50	23.05	23.20	23.35	23.50
Harrogate	dep	21.45	21.60	21.75	21.90	22.05	22.20	22.35	22.50	23.05	23.20
LEEDS City	dep	21.55	22.10	22.25	22.40	22.55	23.10	23.25	23.40	23.55	24.10
Church Fenton	dep	22.05	22.20	22.35	22.50	23.05	23.20	23.35	23.50	24.05	24.20
Wetherby	dep	22.15	22.30	22.45	23.00	23.15	23.30	23.45	24.00	24.15	24.30
Harrogate	dep	22.25	22.40	22.55	23.10	23.25	23.40	23.55	24.10	24.25	24.40
LEEDS City	dep	22.35	22.50	23.05	23.20	23.35	23.50	24.05	24.20	24.35	24.50
Church Fenton	dep	22.45	23.00	23.15	23.30	23.45	24.00	24.15	24.30	24.45	25.00
Wetherby	dep	22.55	23.10	23.25	23.40	23.55	24.10	24.25	24.40	24.55	25.10
Harrogate	dep	23.05	23.20	23.35	23.50	24.05	24.20	24.35	24.50	25.05	25.20
LEEDS City	dep	23.15	23.30	23.45	24.00	24.15	24.30	24.45	25.00	25.15	25.30
Church Fenton	dep	23.25	23.40	23.55	24.10	24.25	24.40	24.55	25.10	25.25	25.40
Wetherby	dep	23.35	23.50	24.05	24.20	24.35	24.50	25.05	25.20	25.35	25.50
Harrogate	dep	23.45	24.00	24.15	24.30	24.45	25.00	25.15	25.30	25.45	26.00
LEEDS City	dep	23.55	24.10	24.25	24.40	24.55	25.10	25.25	25.40	25.55	26.10
Church Fenton	dep	24.05	24.20	24.35	24.50	25.05	25.20	25.35	25.50	26.05	26.20
Wetherby	dep	24.15	24.30	24.45	25.00	25.15	25.30	25.45	26.00	26.15	26.30
Harrogate	dep	24.25	24.40	24.55	25.10	25.25	25.40	25.55	26.10	26.25	26.40
LEEDS City	dep	24.35	24.50	25.05	25.20	25.35	25.50	26.05	26.20	26.	

pany and afford evidence of the value of its training. Next let me give a word of praise for the quiet resolution displayed by the staff as a whole in facing the difficulties due to a state of war. There is little glamour about railway work in these troubled times, when passenger trains travel slowly and the blackout hampers operations at stations, marshalling yards, and docks. Yet all concerned have dealt most efficiently with a heavy traffic, developing in new directions and taxing facilities at many places almost to the breaking point.

"I know I may appeal to you one and all to carry on in the same spirit as you have shown so far. Do not be concerned about any threat to our lines of communication whether by reason of a great volume of diverted traffic or from anticipated foreign intervention. We are passing through a crisis when nothing counts so much as the steadfast performance of our daily duties in the face of every obstacle. Let us go forward to 1940 with the determination to see things through, not staying our hand until peace is secured, with trade and commerce flowing once more through the natural channels, and prosperity restored to the nations of the world."



British railway service badges of two wars. Left: The war of 1914-1919. Right: The present war

The following new year message from Mr. Robert Holland-Martin, the Chairman, was issued to every member of the Southern Railway staff:—

"When 1939 came in a year ago few of us thought that before three-quarters of the year could pass we should be involved in a war for Freedom; but so it is, and my message for 1940 finds each one of us endeavouring to 'do his bit' to help our brave comrades now in the field fighting for us by air, by land, and by sea. How best can we of the Southern do our bit?"

"There are many ways, but the most important of all is to do our own work well and thus keep the Southern services working with the greatest possible efficiency, for remember it is by those services that we can best help England on the home front and keep her forces and those of the Empire supplied and fed at the seat of war. This dual task is no easy one. It is one hedged with difficulties and continual hindrances, for the staff at the stations, sidings, marshalling yards, and docks handicapped as they are by the blackout, have to contend with the added problems of the considerable increase of our freight traffic, worked as it has to be in the day time in the midst of our passenger traffic. The passenger traffic too is a problem in itself, but on every side I find Southern men rising to the occasion.

"The station staffs are in all places doing their best to help our passengers by giving extra service in calling out station names, whitening dangerous corners, and giving all information and help willingly and cheerfully as from friend to friend. The men of the marine department are also carrying on their jobs, dangerous and irksome as they frequently are today, on our Southern ships, our wharves, and quays with alacrity, keenness, and courage. In our offices the staffs are working efficiently, often in new surroundings and under unaccustomed conditions—some of them doing the work of their colleagues who have been called to the Services.

"Watching as I do the work of the Southern and seeing how, despite all the difficulties, it is being carried on smoothly and well and earning the constant praise of the public, I am proud indeed of my staff—officers, men, and women. I wish therefore by this message to let each of you know how much I, your Chairman, and all your directors appreciate your efforts to carry on the work of the Southern efficiently and well and

I ask you to continue wholeheartedly that good work and to realise that by so doing you are rendering invaluable service to your Country, the Empire, and our Allies, and helping to win the victory that will come. I wish you all a very happy and successful New Year—and may it close in peace."

Military Traffic in Victoria, Australia

During October military traffic on the railway assumed proportions comparable with the heaviest during the last war. On October 9, ten special trains—some of them of 12 coaches—converged upon the Seymour and Mt. Martha districts from the North-Eastern, Goulburn Valley, Eastern, South-Eastern, and Metropolitan Districts; 82 carriage and many open trucks were used, the latter for the carriage of field guns. These trains had to be scheduled so as to run between the ordinary ones, on both outward and return journeys, without interfering with their timekeeping, and the part played by the Central and Seymour traffic control was invaluable. The organisation and co-operation with the military were remarkable, and earned unstinted praise from the G.O.C. 3rd Division. Large numbers of troops are also being carried to other camping areas, and at weekends special leave trains have also to be run. Here, as elsewhere, the railway is proving indispensable for the transport of troops and military material in the mass.

Indian Railway War Problems

The outbreak of the war in Europe has already given rise to many problems in Indian railway administration, dictated mainly by a substantial increase in the price of all railway materials and equipment, and it is expected that prices will further advance as the war continues. Moreover, serious difficulties are being experienced in obtaining materials from abroad. Engineering workshops in Europe and America that are free to accept orders for export, are heavily booked ahead and there is likely to be considerable delay before new orders are executed. During the last war, renewals and replacements were allowed to stand over, with the result that the postwar rehabilitation programme severely strained Government finances. Under the changed conditions arising out of the separation of railway finance from the general Government exchequer and the establishment of a depreciation fund, however, the financial side of the problem of the maintenance of the Indian railways in a state of efficiency offers much less anxiety now than in the years of the last war. At the same time, increased cost of railway materials must inevitably have a depressing effect on the net railway revenues unless such increase is countered by a corresponding economy in other expenditure and expansion of traffic receipts. It is understood that the Government of India and the Railway Board have under consideration measures to achieve results in both these directions.

Official Statement on French Railway Traffic

According to statements made to the French press by M. Goursat, General Traffic Manager of the National Railways Company (S.N.C.F.), the daily S.N.C.F. passenger train mileage before the war averaged 400,000 and the goods train mileage 260,000. In 1940, he estimated that the corresponding average figures would be 300,000 passenger train-miles and 390,000 goods and military transport train-miles; so that though the passenger train-mileage thus showed a large decrease, the goods and other train-mileage in 1940 would be about 50 per cent. above the average of 1939. Therefore, he said, it was unlikely that the S.N.C.F. could increase the passenger-train mileage in the current year. M. Goursat explained, however, that this did not mean that no improvement of the passenger service was in prospect, but that any improved facilities could come only from changes in the existing timetables and not from any increase in the passenger train mileage. The S.N.C.F. might even be compelled, he said, to restrict further passenger traffic for imperative reasons. He went on to point out that 20 per cent. of the railway staff had gone to the front on active service, and that the resources of the S.N.C.F. in regard to locomotives and rolling stock were limited. M. Goursat also wished the public to know that 30 per cent. of the passenger coaches, formerly available for the *rapides* and express trains had been converted for use

in ambulance or special military leave trains, and further emphasised that it was a national necessity to economise supplies of coal and all kinds of maintenance material.

Meanwhile civilian goods traffic was growing, because of the increasing trade and also the fact that other means of transport had found it impossible to maintain the level of their pre-war activities. All this surplus traffic had been transferred to the railways and considerable volumes of long-distance and international traffic had been diverted over French lines. In this connection, M. Goursat cited the transport of coal from Belgium to Switzerland, which formerly had gone by way of the Rhine, but now the traffic had come to the French railways. The difficulty of access to certain seaports had also brought increased traffic to the railways. For instance, American and Dutch shipping companies were consigning cargoes to Genoa, and thence the goods came through France. The Belgian liners from Antwerp to the Congo were now loading and unloading goods at La Rochelle. This also meant additional rail traffic across France.

Next to military traffic, said M. Goursat, precedence has to be given to the transport of goods, especially of materials required to maintain industrial activity in the national interest. The transport of passengers, which is not of direct national interest—except in certain special cases provided for under the railway regulations—comes last in point of importance. In present circumstances, stated M. Goursat, the public cannot expect the railways to give the same facilities for travel as in time of peace. Though the S.N.C.F. is always ready to consider suggested modifications in passenger services not requiring additions to the existing train-mileage, it relies upon the good sense of the public not to demand anything incompatible with wartime necessities.

Traffic Regulations by Decree in France

A Government Decree has now fixed the regulations under which civil merchandise will be carried for the duration of hostilities in France. Previously operated jointly under military requisition and the Ministry of Public Works and Transport, such merchandise was carried without any guarantee as to time of delivery and without the railway concerned accepting responsibility for the condition of the goods on arrival.

The new decree is intended to restore a degree of certainty as to time of delivery and to render the railways responsible

for damage to goods caused by their own negligence or errors. The decree provides that the railways shall carry, in order of priority: (1) Military supplies, (2) traffic of national importance, and (3) civil merchandise traffic of all kinds. Ministerial instructions issued from time to time will define the conditions under which the second and third classes are to be carried.

Responsibility for loss of goods in transit is limited to the value of the goods on the day and in the condition they were delivered to the railway. To this may be added the amount of import duties paid, prior transport costs or prepaid carriage charges. For goods which are totally destroyed or spoiled, the same rules will apply. In case of partial loss or damage, the railways will be responsible for the loss *pro rata* to the total value as calculated for total loss or damage. Indemnities for delay will also again be allowed, under the same rules as formerly, but in no case may this exceed the indemnity which would be due for total loss. In conformity with this decree, an instruction of the Minister of Public Works and Transport has fixed the delay permissible throughout the greater part of France, but excluding the military zone, at 24 hr. extra for fast freight carried 400 km. or less, and 48 hr. for greater distances. For slow freight, the peacetime permissible delay is doubled, with the proviso that the additional delay may in no case be less than three days. For traffic in the army zone, the delays are fixed at double those in the rest of the country. The railways may, moreover, at any time, suspend deliveries of less than car load consignments, provided that the person to whom the goods are sent is notified on their arrival that delivery will not take place.

Import Difficulties and Railways in France

Difficulties created by the considerable changes which have taken place since the war in import and export regulations have led the French railways to ask transporters to pay closer attention to formalities. Railways have found that frontier stations are becoming clogged with wagons of goods intended for export, but which cannot be exported until formalities have been completed. This not only renders traffic at these frontier stations difficult, but also immobilises large numbers of wagons. Transporters are, therefore, being asked to see that no goods are loaded for export until all the necessary formalities have been completed, and the necessary documents either attached to the railway transport documents or sent to the frontier station by which the goods must pass.

STAFF AND LABOUR MATTERS

Railway Shopmen

When the National Railway Shopmen's Council met on January 16, the railway companies, while undertaking to consider the claim for a 10s. a week increase, promised the trade unions that increases corresponding with those awarded by the Railway Staff National Tribunal in their Decision No. 6 would be granted to railway shopmen with retrospective effect to the operative date of the tribunal's award. A date for a further meeting of the council has not yet been fixed.

The general executive council of the Transport and General Workers' Union on January 19 received a report which referred to "serious delay" on the part of the railway companies in coming to a decision on the shopmen's claim for increased wages. In a statement for publication the council said that "this delay is causing very grave dissatisfaction among the railway shopmen of the country, and unless this state of affairs is remedied it is likely to reflect itself in reduced efficiency within the industry. The council,

therefore, calls for an immediate decision, and pledges itself to use all the resources of the union to secure a definite disposal of the wage application, believing the settlement to be long overdue."

Road Haulage Wages

The Transport & General Workers' Union has submitted to the Central Wages Board a claim for increases in wages above the wages rates recently approved by the Minister of Labour, and Mr. Bevin, the General Secretary of the union and the Chairman of the employees' side of the Road Haulage Central Wages Board, has called for an early meeting of the board to discuss the question. Mr. Bevin states that the rates laid down by the Road Haulage Wages Board were fixed on a pre-war basis. Since then money values have changed considerably and wage advances have been receiving consideration in the majority of industries. In a letter to the employers' organisations Mr. Bevin asks if, in view of the urgency of the matter, they will arrange for an immediate advance.

L.P.T.B. Electricity Generating and Sub-Station Staff

Arising out of an application for an increase of 10s. a week to meet increased cost of commodities and the special conditions imposed upon the staff arising out of the war, the following agreement has been concluded between the London Passenger Transport Board and the trade unions:—

(i) War wage increase of:—

- 4s. a week for 48-hour week, or 1d. an hour for adult male labour;
- 2s. a week for 48-hour week, or ½d. an hour for youths between 18 and 21 years of age;
- 1s. 6d. a week for 48-hour week, or ¾d. an hour for boys under 18 years of age.

- (ii) The increase to operate for the payroll commencing January 15, 1940.
- (iii) The increase to be included in the calculation for overtime and added rates.
- (iv) Any employees in the railway generating stations, sub-stations, &c., whose wages are governed by outside trade agreements or award, are excluded from this offer.

QUESTIONS IN PARLIAMENT

Recruiting of Railwaymen

Mr. W. Dobbie (Rotherham—Lab.), on January 16, asked the Secretary of State for War if he was aware of the inconvenience caused to many young men in the railway and other services who were working a long way from home, by the short allowance of time, when they were called to the colours after having attested; and would he consider making the notice to report for service seven days instead of three days.

Mr. Ernest Brown (Minister of Labour and National Service): I have been asked to reply. I have received no representations from men in the railway or other transport services on this matter. The National Service (Armed Forces) Act requires at least 3 days' notice to be given to men to report for service, but the general practice hitherto has been to give not less than 6 days, and I hope it may be possible to continue to do so.

Negotiations with the Railway Companies

Mr. D. L. Lipson (Cheltenham—Ind.), on January 17, asked the Minister of Transport if he could state if an agreement had been arrived at with the railway companies; and, if so, on what terms.

Captain Euan Wallace, whose reply to this and a number of supplementary Questions is given in full on page 125, said that he was not yet in a position to say that agreement had been reached.

Buckinghamshire Railway Service

Mr. N. B. Goldie (Warrington—C.), on January 17, asked the Minister of Transport, whether, in view of the great inconvenience caused to the travelling public by the suspension of the L.N.E.R. service from Marylebone to intermediate stations on the Aylesbury line, he would take steps to restore such services at the earliest possible date.

Captain Euan Wallace: This line is served both from Baker Street and Marylebone. The service from Baker Street is approximately the same as pre-war. It has not yet been found possible to restore the full pre-war service operating from Marylebone, but as from January 1 this year eight additional trains each way have been introduced, and I think that the combined service now available is reasonably adequate for the intermediate stations. If, however, my hon. and learned friend has any particular station in mind and will let me have details I will gladly have further enquiries made.

Coal Transport

Mr. James Griffiths (Llanelly—Lab.), on January 17, asked the Minister of Transport, if he was aware that recently

a number of wagons of coal were brought from Ellestown, in Leicestershire, to Llanelly, South Wales, for the use of a Government service; and whether he would consult with the department concerned to make arrangements to draw their supplies of coal from the near-by coalmines, and thus avoid the cost and waste involved in conveying coal from the Midlands to South Wales.

Captain Euan Wallace: Yes, Sir. I have, with the assistance of my hon. friend, the Secretary for Mines, investigated the circumstances of this case, which did not involve wasteful use of trucks since large numbers have to be returned empty from the Midlands to South Wales. I agree however that in present conditions economy in the use of transport demands that supplies of fuel should be drawn from the nearest suitable and available source.

Demurrage on Railway Wagons

Mr. James Griffiths (Llanelly—Lab.), on January 17, asked the Minister of Transport if he could make a statement on the working of the new scale of demurrage on wagons; if he was aware of complaints in some areas of hardships caused by the lack of facilities to stack coal at railway sidings; and whether he was taking any steps to deal with those difficulties.

Captain Euan Wallace: The Order authorising the railway companies to make increased demurrage charges did not come into operation until December 15 last and its full effect has not therefore been felt, but I am informed that since the new charges came into force there has been a substantial improvement in the wagon position. Where wagons have been detained beyond the free periods now allowed, accounts for the charges at the increased rates are being rendered, but the railway companies fully realise that the charges must be applied with reasonable consideration for the difficulties of traders. Representations made by traders regarding the application of the charges in particular cases will receive the special attention of the railway companies in the light of the assurance which I gave the House on December 6 that the Order would be administered with due regard to any genuine difficulties in giving strict compliance. The railway companies are anxious to ensure that the action taken will be on uniform and equitable lines. As regards the second part of the Question, I have had certain representations alleging shortage of stacking accommodation at railway sidings in one or two areas, and these are being investigated.

Mr. W. A. Burke (Burnley—Lab.): Is the Minister aware that throughout the industrial North there is absolutely no accommodation for stacking coal and that it is quite impossible, with the short working hours, lack of petrol and other things, for dealers to get the

wagons out of the way in the 48 hours at present allowed?

Captain Wallace: I have already given an assurance that if it is impossible for the dealers to comply with the Order that fact will be taken into account.

Mr. Burke: If I send the Minister particulars from Lancashire, will he deal with the matter?

Captain Wallace: I will not say that I will deal with it in the sense of necessarily accepting all that the hon. member says, but I will certainly look into the matter.

Nigerian Railway Employees

Mr. A. Creech Jones (Shipley—Lab.), on January 18, asked the Secretary of State for the Colonies whether consideration had been given to the improvement of conditions of the railway employees in Nigeria and the payment of wages weekly instead of monthly; and whether the railway provident fund would be extended to the shopmen and the principle of industrial arbitration extended to disputes.

Mr. Malcolm MacDonald (Secretary of State for the Colonies), in a written reply stated: I have received representations on these matters, which are under consideration by the Governor of Nigeria, whose final recommendations I am awaiting. The importance of establishing conciliation machinery has been impressed on all Colonial Governments, and I am asking the Governor of Nigeria whether the enactment of legislation with this object is contemplated.

Government Orders for L.M.S.R.

Mr. P. J. Noel-Baker (Derby—Lab.), on January 18, asked the Minister of Supply what orders for armament requirements he had placed with the engineering works of the L.M.S.R.

Colonel J. J. Llewellyn (Parliamentary Secretary to the Ministry of Supply) wrote in reply: The L.M.S.R. has various orders for the Ministry of Supply, but it would not be in the public interest to give details.

Calling Out Station Names during Blackout

Captain L. F. Plugge (Chatham—C.), on January 18, asked the Minister of Transport if he would see that employees of the main and suburban line railways in charge of stations were instructed to call out the name of each station during blackout hours at which a train might stop, since it was impossible to read any names at night; and that the London Passenger Transport Board's bus and underground railway employees, where necessary, follow the same practice.

Captain Euan Wallace (Minister of Transport), in a written reply, stated: Employees of the main-line railway companies and of the London Passenger Transport Board have already received instructions to call out the names of railway stations and the stopping places of buses. Steps are also being taken to improve the illumination of station name plates.

MINISTRY OF TRANSPORT ACCIDENT REPORT

**Between Stevenston Moorpark and Saltcoats, L.M.S.R. :
August 5, 1939**

The 12.30 p.m. express, Glasgow Central to Ardrossan, consisting of 7 bogie coaches drawn by standard Class "4F" 0-6-0 tender engine No. 4315, travelling at moderate speed, was derailed on a bridge over Canal Street, Saltcoats, the engine and tender running down the embankment and overturning, followed by three coaches. Two passengers and the fireman were killed and the driver fatally injured; 6 passengers were detained in hospital and 53 received minor injuries or shock. A good deal of damage was done to the stock. Colonel A. C. Trench conducted the inquiry and attributed the accident primarily to a stone or stones on the track.

The line between Lugton Junction and Ardrossan is used throughout the year for goods traffic, passenger traffic being confined to the summer. There is a 40 m.p.h. speed limit where the derailment occurred. Track consists of 90-lb. rails, chairs with 4 spikes, and slag ballast. At the point of derailment it was due for relaying in 1940 or 1941, the rails dating from 1907 and being well worn on the curve of 40-ch. radius in rear of the spot, but not to a dangerous degree, having regard to the speed restriction. The general condition of the track was found to be satisfactory. Cant on the curve averages 2½ in.; the line was undamaged up to a point one rail length beyond where the derailment began. Derailment marks were visible over a length of about 17 sleepers, after which the track was badly damaged and nothing useful was to be seen. On the first sleeper of this series there was a considerable amount of white stone dust and several large pieces of stone freshly broken. Crushed stone deposit was found on the top of the rail ¼ in. thick after all train wheels had passed over it. A flange mark began immediately after this deposit. The stone was freestone, much used locally; large portions were lying inside the bridge abutments. Marks some 55 yd. in rear of the site suggested that ballast, which is hard slag, had been placed on the right hand rail. The low stone boundary walls of the line are easily surmounted from the roadway and footpaths, evidently considerably used, lead up to the railway. There was evidence of trespassing, especially by school-children in the holidays. The engine wheel guards were bent in the accident but proved to be of correct length.

The timing of the train is easy and allows adequately for the observance of speed restrictions. Two in the rear of the site were duly observed and it is clear that speed at the moment of derailment was moderate; it was variously estimated as being 20 to 30 m.p.h. Guard Hall, in the fifth

coach, said they were travelling quite smoothly. The first he knew was a jar, when the van seemed to go into the air and stop very quickly. He did not notice any brake application. Mr. J. G. Barr, retired L.M.S.R. Motive Power Superintendent, Glasgow, estimated speed at 30 m.p.h. He noticed



The engine and leading coach of the Ardrossan train derailed at Saltcoats on August 5, 1939

a series of jerks and no brake application. Two other witnesses both confirmed that speed was moderate. One was looking broadside on at the scene and said the engine gave a wobble at a point which would be where the broken slag was found on the rail. The engine continued to run and then gave a leap at the far end of the bridge. The other observer thought the third coach derailed first.

Inspecting Officer's Conclusions

There is no doubt that one or more stones on the left-hand rail was the primary cause of the derailment. The slag on the right-hand rail further back may have contributed by setting up a sharp roll, enhancing liability to derailment by a minor obstruction on the left-hand rail, but this is a matter of speculation only. There can hardly be a doubt that the engine was derailed first, in spite of the clear and definite statement of one of the outside witnesses regarding the third vehicle. It is impossible that a derailment initiated by that vehicle should have immediately derailed the two coaches ahead of it and the engine. The curvature of the line, unobjectionable under normal conditions, becomes a contributory factor in that the lifted

wheel would have probably come down had it not been pressing hard against the rail, without traversing the head. The worn condition of the rail would be also more likely to let the wheel continue to climb than a new rail would. The rail presented, however, no danger to normal operation, the train was running at moderate speed, and no blame rests on the crew. There is nothing to criticise, as was suggested, in the use of an 0-6-0 engine for the moderate train schedule concerned. The course of a derailment in

conditions such as these must be purely speculative; the presence or absence of guiding wheels cannot be said to have any definite bearing on it. No recommendations are made in connection with the accident.

DIVERSION OF TRAINS AT ILFORD, L.N.E.R.—The erection of a large footbridge at Ilford carriage sidings on Sunday, January 21, necessitated the closing of all lines between Seven Kings and Ilford for 5 hr. Main-line and Southend expresses to and from Liverpool Street were diverted via Woodford and Newbury Park loop line. Trains normally serving Ilford called at Seven Kings instead. No trains ran between Seven Kings and Ilford after the 9.30 a.m. from Ipswich and the 10.37 a.m. from Liverpool Street, and the service was not resumed until the passing of the 2.15 p.m. from Liverpool Street and the 2.43 p.m. up from Gidea Park. A local service was run between Ilford and Liverpool Street (not serving Manor Park, Forest Gate, or Maryland Point). During the interruption to services, L.N.E.R. railway tickets were available on London Transport buses and trolley-buses between Stratford, Seven Kings, Ilford, and Newbury Park.

Locomotive Performance in Norway

(See illustration on page 119)

In the February 25, 1938, issue of THE RAILWAY GAZETTE a description was given of the 2-8-4 four-cylinder compound express locomotives of the Norwegian State Railways, first introduced in 1936 in order to eliminate the double-heading of trains over the mountainous Dovre section of the Oslo—Trondheim main line. On p. 119 of this issue we reproduce a striking photograph of one of these powerful locomotives in action, in a typically Norwegian setting. On test the "Dovre-gubben" locomotives, as this type is called, have shown themselves capable of maintaining 37 m.p.h. up continuous 1 in 55 gradients with tare loads of 345 tons. With 296 tons (the limit between Dombaas and Störlén for the 4-cylinder compound 4-6-0s when used in pairs over this section) a speed of 40½ m.p.h. has been sustained up the same inclination, compared with the 33 m.p.h. maintained in favourable conditions by two of the 4-6-0 engines. The power output required of the 2-8-4 engines for such uphill speeds as these is roughly 2,400 h.p. at the rims of the driving wheels, corresponding to an i.h.p. of 2,650—a notable figure for a locomotive weighing only 98½ tons, and designed to run over 70-lb. flat-bottom rails with a maximum axle loading of only 15½ tons. On test over the short level stretch of line between Hjerkin and Fokstua at an elevation of well over 3,000 ft. above sea level one of these locomotives recorded a maximum speed of 71½ m.p.h., notwithstanding its eight-coupled driving wheels with the small diameter of 5 ft.

In a recent issue of our French contemporary *Transports*, Baron G. Vuillet described in an article some of his experiences of Norwegian locomotive performance during the summer of 1938. Among these was a footplate journey over the mountain section of the Oslo—Trondheim line in the south-bound direction from Störlén to Dombaas. The 4-6-0 locomotives used here (except when the new 2-8-4s are substituted) were first introduced between 1910 and 1914 as four-cylinder simples, but were subsequently rebuilt as four-cylinder compounds, with boiler pressure raised from 170 to 228 lb. per sq. in. The result was both to increase their power and at the same time to reduce coal consumption by 3 to 4 per cent.—a valuable consideration in a country which has no indigenous coal supplies. These rebuilt locomotives, and others built subsequently as compounds, have 15½ in. h.p. and 23 in. l.p. cylinders, with a common stroke of 23½ in., 1,345 sq. ft. of heating surface and 409 sq. ft. of superheating surface, 25.8 sq. ft. of grate, 42½ tons adhesion, and a weight in working order of 64 tons. The empty weight of the train by which Baron Vuillet

travelled was 279 tons, and the gross weight (of nine corridor coaches) 300 tons.

The two 4-6-0s hauling this load maintained a speed of 33 m.p.h. up lengthy stretches of 1 in 55 gradient, which required a cut-off of 60 per cent. in the h.p. cylinders, and gave a pressure of 70 lb. at l.p. admission—an excellent figure showing that all four cylinders were dividing the work equally. With 50 per cent. cut-off, the speed up 1 in 66 was 37 m.p.h., and, with 40 per cent. cut-off, 47 m.p.h. was maintained up 1 in 100, and 45 m.p.h. up an average grade of 1 in 100. Out of Stören the train passed Snöan, 5.7 miles (largely up 1 in 55) in 11 min. 40 sec., and Söknedal, 9.0 miles, in 17 min. 48 sec.; the remaining 12.6 miles to Bergaak, with grades easing first to 1 in 90 and then to an average of 1 in 200, on which speed rose to 52 m.p.h., took 17 min. 55 sec. The 7.0 miles from Bergaak to Alsberg, partly up 1 in 66, took 10 min. 55 sec. start to stop, and the undulating 16.1 miles from Alsberg to Opdal took 23 min. 45 sec., with a maximum speed of 55 m.p.h. From Opdal climbing begins, first at an average of 1 in 100, up which Engan, 8.3 miles, was passed in 12 min. 30 sec., and Drivstua, 13.5 miles, in 19 min. 50 sec. Then the grade steepens to 1 in 55, on which 33 m.p.h. was maintained, and Kongsvoll, 22.1 miles, was reached in 34 min. 40 sec. The last stage of the climb, from Kongsvoll to Hjerkin (where the line is 3,362 ft. above sea level), occupied 13 min. 25 sec. start-to-stop for the 7.1 miles. From Hjerkin a smart run was made across the plateau to Fokstua of 16 min. 10 sec. for the 12.5 miles, with two maxima of 56 m.p.h. (separated by a slack for Valaasjo crossing loop), and the downhill time of 15 min. 55 sec. for the

11.6 miles from Fokstua to Dombaas completed a gain of 11 min. on schedule. It should be added that the difficulty of running over this section is increased by frequent curves of 45-ch. radius.

Such difficulties, however, pale beside those of the Oslo—Bergen main line, which from an altitude of 184 ft. at Voss climbs in 44½ miles to 4,299 ft. above sea level near Grotruste, between Myrdal and Finse, on the eastbound run. Save for the 3½ miles through Gravehalsen tunnel, which are level, the gradient of 1 in 46½ is almost continuous, and curves of 12½ ch. radius abound. Over this section passenger trains are worked by four-cylinder compound 4-8-0 locomotives, with h.p. cylinders 16½ in. dia., l.p. cylinders 24½ in. dia., and a common stroke of 23½ in.; their heating surface is 1,787 sq. ft., superheating surface 490 sq. ft., grate area 32.3 sq. ft., working pressure 228 lb., adhesion weight 57 tons, and weight in working order 79 tons.

One of these locomotives, with a train of 245 tons weight, steadily maintained a speed of 27-28 m.p.h. on parts of the 1 in 46½, and for nearly 2 hr. continuously the power output was of the order of 1,600 h.p. The 19.3 miles from Voss up to Mjölfjell occupied 49 min. 25 sec.; the 11.4 miles from there to Myrdal were run in 27 min. 50 sec., and another 38 min. 35 sec. sufficed to clear the summit at Kirnd, 14.2 miles away. In less than 116 min. running time, including three starts from rest, the locomotive had thus lifted its train, in the course of 45 miles, to an altitude almost equal to that of the summit of Ben Nevis above sea level. The normal average consumption of Welsh steam coal on the run over the mountain section between Voss and Aal is 70 lb. a mile, but on the 1 in 46½ climbs this consumption is nearly doubled. The night service, maintained with a train weighing up to 345 tare tons, requires two 4-8-0 locomotives coupled, and a continuous output of 3,000 h.p. up these formidable grades.

Irish Traffic Returns

IRELAND		Totals for 2nd Week			Totals to Date		
		1940	1939	Inc. or Dec.	1940	1939	Inc. or Dec.
Belfast & C.D. (80 miles)	pass.	£ 2,195	£ 1,780	+ 415	£ 3,849	£ 3,048	+ 801
	goods	538	348	+ 190	951	567	+ 384
	total	2,733	2,128	+ 605	4,800	3,615	+ 1,185
Great Northern (543 miles)	pass.	9,500	8,200	+ 1,300	19,800	17,050	+ 2,750
	goods	10,350	8,450	+ 1,900	19,250	16,100	+ 3,150
	total	19,850	16,650	+ 3,200	39,050	33,150	+ 5,900
Great Southern (2,076 miles)	pass.	29,883	28,611	+ 1,272	61,611	59,585	+ 2,026
	goods	43,830	39,424	+ 4,406	86,104	81,682	+ 4,422
	total	73,713	68,035	+ 5,678	147,715	141,267	+ 6,448
L.M.S.R. (N.C.C.) (271 miles)	pass.	3,940	3,080	+ 860	7,640	6,090	+ 1,550
	goods	2,850	2,550	+ 300	5,460	4,600	+ 860
	total	6,790	5,630	+ 1,160	13,100	10,690	+ 2,410

RAILWAY AND OTHER MEETINGS

Rohilkund & Kumaon Railway Co. Ltd.

The annual general meeting of the Rohilkund & Kumaon Railway Co. Ltd. was held at Gresham House, Old Broad Street, E.C., on January 23, Lt.-Colonel T. Gracey, R.E., Chairman of the company, presiding.

The Secretary (Sir James Williamson) read the notice convening the meeting and the auditor's report.

The Chairman said: Following the usual procedure I presume the directors' report and accounts, which have been circulated to all shareholders, may be taken as read.

The gross earnings of the joint undertaking show a decrease of Rs. 3.68 lakhs compared with those of the previous year. Coaching traffic increased both in numbers and receipts, but goods traffic decreased by Rs. 4.46 lakhs due to a heavy falling off in the carriage of sugar cane and its products.

Compared with the previous year working expenses decreased slightly, though in this year 1.17 lakhs more were included representing the Revenue portion of the renewal of engines and boilers which completes the present programme of engine renewals.

Fortunately the railway has managed to obtain most of the European stores required for locomotive and other maintenance for the next two years at slightly over pre-war levels, but on the other hand the costs of nearly all material has increased and it has to be expected that with the limitations and restrictions which war conditions now impose on the manufacture, supply and shipment of railway supplies of all kinds, working expenses will be further increased. It will also be seen by reference to the net revenue account statement No. 7 that the provision for Income Tax, both English and Indian, has had to be increased from £33,671 to £45,955.

Dealing now with the net revenue account on page 18 of the Report; the company's share of the net earnings of the undertaking amounted to £108,574, against £125,572, and after adding the share of surplus profits of the Lucknow Bareilly Railway (£7,901) and deducting the slight loss by exchange on remittances to London, the net receipts amount to £116,016, against £134,892 for the year 1938, a decrease of £18,876.

After making the necessary adjustments on account of debenture interest, preference and interim dividends, providing £4,500 for the Secretary of State's share of surplus profits and appropriating the interest on investments, cash balances, &c., usually credited to the reserve account, the amount to be dealt with today is £34,073. Out of that sum your directors propose to pay a final dividend of 6 per cent. with a bonus of 2 per cent. amounting to £26,267. This, together with the interim dividend and bonus

of 8 per cent. already paid, will make a total distribution of 16 per cent. for the year. The carry forward to next year will be reduced to £7,806 7s. 4d.

As I have already mentioned, the sugar industry, which bulks largely in our business, was responsible for the drop in earnings. Other commodities, with the usual fluctuations, showed an improvement, but sugar cane and manufactured sugar, gur, jagree, molasses, &c., lost 6½ lakhs of rupees compared with the previous year, the tonnage moved by rail being only 56 per cent. of that handled in a normal year. The cane crop suffered from the unusually heavy rainfall of the 1938 monsoon, yielding poor quality cane and a short supply.

The Motor Vehicles Bill has been enacted, but it will take some time to enforce its new provisions. Carrying of public goods in private lorries and overloading of buses is still a common practice on the roads, and although a few checks have been made by the police in this direction the practice has not abated to any appreciable extent. The situation is being closely watched and suitable action is being taken where necessary to maintain the railway's position.

Although the disturbed world conditions render any forecast uncertain, it may be said that prospects are not unpromising. Coaching traffic is expected to be about normal and the various crops, including sugar cane, are reported to be good.

In previous speeches I informed you that the question of revising the scales of pay for the superior staff recruited after 1933, which have been found to be inadequate to secure men suitably qualified and of the desired standard for the company's service, had, in conjunction with the Boards of other company railways operating in India, been referred to the Secretary of State for India. As no reply has so far been received to the joint representation the attention of the Secretary of State has recently been invited to this matter, which is of importance and increasing urgency.

I wish to convey our hearty thanks to the Agent and staff, in India, and in our office in London, for the excellent work they have done throughout the year, and congratulate them on the way they have faced the inconveniences and even hardships of the times with their traditional loyalty.

Before I put the motion for the adoption of the report, I will ask if any gentleman has any question he would like to ask.

There being no questions the Chairman then moved, and the Rt. Hon. Lord Meston seconded, the approval and adoption of the report and accounts; the resolution was carried unanimously.

The Chairman then proposed: "That the final dividend of £6 per cent. and a bonus of £2 per cent. for the half-year ended September, 1939, on the ordinary stock of the company, subject to income tax, be, and the same is hereby declared, making with the ad-interim dividend of £4 per cent. and a bonus of £4 per cent. paid on July 31, 1939, a total distribution of £16 per cent. for the year ended September 30, 1939."

Mr. W. Stantiall seconded the resolution, which was unanimously carried.

The Chairman proposed and Lt.-Colonel W. R. Izat seconded the re-election as a Director of the Rt. Hon. Lord Meston; the resolution was unanimously carried.

The re-election as a Director of Mr. W. Stantiall was proposed by the Chairman and seconded by Sir Malcolm N. Hogg, and carried unanimously.

Mr. F. A. Wake proposed the re-election of the auditors; Lt.-Colonel A. H. C. Sutherland seconded, and the motion was unanimously adopted.

Lt.-Colonel A. H. C. Sutherland proposed a vote of thanks to the Chairman and directors and the Agent and staff in England and India.

The motion was carried and the Chairman in his reply thanked the shareholders for their vote and said he and the directors would continue to do their best to deserve them.

A G. A. HARTLEY & CO. JUBILEE.—A complimentary dinner and presentation of a canteen of silver was given recently at the Dorchester Hotel to Mr. E. R. Clarke, the senior director of G. A. Harvey & Co. (London) Ltd. This pleasing ceremony was to mark fifty years of service with the firm, which Mr. Clarke joined in 1889. He has been a Director since 1914, when the undertaking became a limited company.

Hopes of Early Statement on Government Compensation

In response to a series of Questions in the House of Commons on January 24, the Minister of Transport said that negotiations between the railway companies and the Government had now reached such a stage that he was hopeful of being able to make an early statement. He thought it would be necessary to publish the terms of the agreement and imagined there would be ample opportunity for Members to debate it.

Forthcoming Events

Jan. 27 (Sat.).—Permanent Way Institution (London), at Central Hall Buildings, Matthew Parker Street, S.W.1, 2.30 p.m. Annual Winter Meeting.

Feb. 3 (Sat.).—Permanent Way Institution (Manchester-Liverpool) at Bolton. "Curves and cant," by Mr. J. Whiteley.

Feb. 12 (Mon.).—Institute of Transport (London), at Charing Cross Hotel, 1 for 1.15 p.m. Luncheon. Address by Rt. Hon. Lord Stamp.

RAILWAY AND OTHER REPORTS

British Columbia Electric Railway Co. Ltd.—A net profit of £318,059 (against £280,451 for 1937-38) was earned for the year ended June 30 last. The year's deferred dividend is raised from 6 to 7 per cent. and £6,437 is carried forward, against £804 brought in.

Shahdara (Delhi)—Saharanpur Light Railway Co. Ltd.—For the half-year ended March 31, 1939, gross earnings were Rs. 4,82,246, a decrease of Rs. 46,752 in comparison with the corresponding period of 1938. Working expenses amounted to Rs. 1,95,032 plus Rs. 42,500 set aside to depreciation reserve fund, making a total of Rs. 2,37,532, a reduction of Rs. 1,966. Net earnings were Rs. 2,44,714, against Rs. 2,89,500. The amount due to the Government of the United Provinces is Rs. 50,405 (against Rs. 85,568). Net profit for the half-year is Rs. 58,634 which, added to Rs. 2,77,662 brought forward, gives a total of Rs. 3,36,296. The dividend for the half-year at the rate of 9 per cent. per annum takes Rs. 56,953, leaving Rs. 2,79,343 to be carried forward. For the corresponding period of 1938 the dividend was at the rate of 10 per cent.

Glyn Mills & Co.—This firm's 111th statement of assets and liabilities which shows the position as at December 31, 1939, is the first to appear since the capital of this old-established private banking house (incorporating Child & Co. and Holt & Co.) was acquired last summer by the Royal Bank of Scotland. Total assets are recorded at £44,668,546. To this amount £6,176,027 was contributed by coin, bank notes, and balance at Bank of England; £2,478,311 by balances with and cheques in course of collection on, other banks in the United Kingdom; £11,578,884 by investments; £6,767,700 by money at call and short notice. These items represent 64.4 per cent. of the deposits of £38,062,341, which show an increase of 6.29 per cent. on 1938. Advances to customers have increased from £10,153,921 to £11,182,466. The reserve fund stands at £530,000, and issued capital at £1,060,000.

National Omnibus & Transport Co. Ltd.—This company, a subsidiary of Thomas Tilling Limited, reports a profit of £109,508 for the year 1939 after deducting £53,000 (against £35,850) for taxation. For 1938 the profit was £127,871. An ordinary dividend of 7 per cent., tax free, against 8 per cent. tax free for 1938, is recommended, and £5,000, against £10,000, is allocated to general reserve, leaving £30,333 to be carried forward, against £30,815 brought in.

Tilling & British Automobile Traction Limited.—The directors recommend a dividend of 4 per cent. for the half year ended December 31, 1939, less income tax, adjusted, at 8s. 6d. in the £, and a further dividend of 2 per

cent. for the year, less income tax at 7s. in the £ (equivalent together to 1s. 2½d. a share less tax) on the cumulative 8 per cent. participating shares (making a total of 10 per cent. less tax for 1939, the same as for the three previous years); and a final dividend of 4 per cent., actual (9½d. a share) free of tax, on the ordinary shares, making 8 per cent., tax free, for the year 1939, against 9 per cent., tax free, for 1938, and 10 per cent., less tax, for 1937. Net profits for the year, after providing for excess profits tax, amounted to £488,441, against £511,587 for 1938.

Gloucester Railway Carriage & Wagon Co. Ltd.—An interim dividend is announced of 5 per cent. on account of the year ending May 31 next. A similar payment was made last year.

Sentinel Waggon Works (1936) Limited.—This company earned a net profit, after providing for taxation, of £19,091 in the 12 months ended July 31, 1939, against £24,425 for 1937-38. As already announced, a dividend of 12 per cent. has been paid on the 6 per cent. cumulative preference shares for the two years to December 31, 1938, leaving arrears from January 1, 1939. The sum of £10,565 is carried forward, against £2,004 brought in.

Central Waggon Co. Ltd.—Trading profits for the year ended September 30, 1939, amounted to £114,397 compared with £97,793 for the previous year, and investment income amounted to £1,732. Net profit was £72,611 after providing £40,000 (against £22,000) for taxation, comparing with a net profit of £72,323 for 1937-38. A sum of £35,000 is again appropriated to reserve, and the dividend of 8 per cent. and bonus of 2 per cent. for the year are maintained, leaving £12,100 to be carried forward, against £8,114 brought in. Most privately-owned wagons have been requisitioned by the Government which has become the tenant of wagon-hiring companies. This company and its subsidiaries own about 30,000 wagons.

Turner & Newall Limited.—Profit for the year to September 30, 1939, after provision by subsidiaries for income-tax liability was £1,727,453, against £1,650,386. After deducting depreciation, directors' fees, income-tax, and N.D.C. £618,826 (against £238,749) there was a net profit of £960,615, against £1,277,694. The final ordinary dividend is 11½ per cent. (against 16½ per cent.), subject to tax, making 15 per cent. for the year, against 20 per cent. for 1937-38. A sum of £100,000 is again placed to reserve, and the balance forward is £66,763, against £116,610 brought in. The buildings, plant, and equipment of all group companies have been maintained in a complete state of repair and efficiency, and their cost has been charged to revenue as usual; in addition £342,000 has been written off as normal depreciation by the group.

British and Irish Railway Stocks and Shares

Stocks	Highest 1939	Lowest 1939	Prices	
			Jan. 23, 1940	Rise or Fall
G.W.R.				
Cons. Ord.	38	21½	39	+3
5% Con. Prefce. . . .	92	71	96½	+7½
5% Red. Pref. (1950) . .	98	83	96½	—
4% Deb.	103	91	103½	+4
4½% Deb.	105½	93½	101	+1
4½% Deb.	110	99	108	+4
5% Deb.	121	109½	118½	+3
2½% Deb.	63½	54	58½	+1
5% Rt. Charge	117	104	112	+2
5% Cons. Guar.	111	96½	113	+4½
L.M.S.R.				
Ord.	17	9½	14½	+1½
4% Prefce. (1923) . . .	46½	20	46	+3
4% Prefce.	63½	37½	63	+4½
5% Red. Pref. (1955) . .	83	58½	85½	+6
4% Deb.	98½	85	99½	+6
5% Red. Deb. (1952) . .	109	101½	107	+2
4% Guar.	87½	73	89½	+6
L.N.E.R.				
5% Pref. Ord.	55½	31½	35½	—
Def. Ord.	31½	13½	21½	—
4% First Prefce. . . .	38½	19	42	+4
4% Second Prefce. . . .	15	7½	14½	+1½
5% Red. Pref. (1955) . .	55	38	58	+3
4% First Guar.	78½	60	78½*	+4
4% Second Guar. . . .	68½	47	70*	+5½
3% Deb.	71½	57	70½	+5
4% Deb.	93	76	90½	+5
5% Red. Deb. (1947) . .	106½	98	104½	+1
4½% Sinking Fund Red. Deb.	104½	96	100½	—
SOUTHERN				
Pref. Ord.	78	46½	68	+3
Def. Ord.	19½	7	14	+1½
5% Pref.	100	76	97½	+4½
5% Red. Pref. (1964) . .	102½	94	98½	+1
5% Guar. Prefce. . . .	116½	103	113	+3½
5% Red. Guar. Pref. (1957)	112½	102½	110½	+3
4% Deb.	103	91½	103½	+4
5% Deb.	118½	109½	117½	+3
4% Red. Deb.	106	98	102½	+1
1962-67				
4% Red. Deb.	102	96	102½	+1
1970-80				
BELFAST & C.D.				
Ord.	6	3	4	—
FORTH BRIDGE				
4% Deb.	98½	81	86½	—
4% Guar.	95	80	84½	—
G. NORTHERN (IRELAND)				
Ord.	6	2½	6	—
G. SOUTHERN (IRELAND)				
Ord.	13½	8	12½	+1½
Prefce.	26	10	23½	—
Guar.	40½	22	38½	—
Deb.	57	45½	54	+1½
I.P.T.B.				
4½% "A"	115	103	109	+3½
5% "A"	123	106½	116½	+5
4½% "T.F.A."	105	100½	103	—
5% "B"	117½	102	110	+5½
"C"	84	63½	65	+1½
MERSEY				
Ord.	2417½	1714	201½	—
4% Perp. Deb.	93½	88½	89	—
3% Perp. Deb.	77	65½	64½	—
3% Perp. Prefce. . . .	55	49½	52½	—

* ex dividend

OFFICIAL NOTICES

Indian State Railways

APPLICATIONS are invited from British subjects of non-Asiatic domicile for an appointment in the Mechanical Engineering and Transportation (Power) Department of Indian State Railways. Candidates must have been not more than 30 years of age on the 1st October, 1939, and must have passed the qualifying examination for A.M.I.C.E., or A.E.I. Mech. E., or have obtained an engineering degree or diploma giving exemption from such examination. They must have served at least four years as pupils or apprentices in locomotive workshops of a

British railway, or in workshops of locomotive builders of repute, and should have had some training in running sheds and in firing and one year's drawing office experience. They should have a thorough understanding of applied mechanics and the nature and composition of all materials used in shops and be able to design, and to calculate stresses on parts of machines.

Further particulars and forms of application may be obtained, on request by postcard (quoting appointment 14 C) from the High Commissioner for India, General Department, India House, Aldwych, London, W.C.2. Last date for receipt of completed applications 12th February, 1940.

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Notes and News

Railway Accident in Poland.—It is reported that on January 19 five persons were killed in a collision between a passenger and a goods train at Krakow, in German-occupied Poland.

Southern Rhodesia Air Services.

The Southern Rhodesian Government has bought by agreement the assets of Rhodesia & Nyasaland Airways Limited and proposes to work the company's services under the title of Southern Rhodesia Air Services.

Railway Accident in France.—A

train carrying troops on leave collided with a parcels train in the Eastern Region of the French National Railways, near Troyes, early on the morning of January 21. Seven persons are reported to have been killed.

Increase in Use of L.N.E.R. Containers.—Loadings of L.N.E.R. containers of all types during 1939 totalled 114,968, against 23,473 during 1930, representing an increase of no less than 390 per cent. The largest individual increase was with insulated meat containers, the loadings of which have risen by 5,544 per cent. Loadings of large open containers rose by 322 per cent., large covered by 267 per cent., and small covered by 217 per cent. By the end of 1928 450 containers were in use on the L.N.E.R., by 1930 the stock had risen to 710; and today no fewer than 4,569 containers of seven principal types are owned by the company.

Irish Railway Valuations.—Judgment has been given by the Supreme Court, Dublin, in the cases stated by Circuit Judge Davitt on the respective appeals of the Great Northern Railway Company (so far as its undertaking in Eire was concerned) and of the Great Southern Railways Company from the valuations made on them by the Commissioner of Valuation, which were £17,500 for the Great Northern and £183,023 for the Great Southern. It was contended by the Great Northern that its valuation should have been £7,113, and the Great Southern put forward £35,656 as the right figure for its undertaking. The arguments before the Court lasted six days and judgment was reserved on December 6 last. Judge Davitt had expressed the opinion that on the evidence before him there was not sufficient material on which to evolve a valuation in accordance with the Railways (Valuation for Rating) Act, 1931. The Supreme

Court decided in favour of the companies, with costs against the Commissioner. It was of opinion that Judge Davitt was wrong in considering as hypothetical tenants the companies themselves, already equipped with all the necessary chattels required properly to operate the undertaking. In the view of the Court the companies were to be considered as being in the same position as any other hypothetical tenant. Judge Davitt was also wrong in rejecting the method advanced by the railway companies of estimating the capital value of the tenant's chattels.

Brazil Electrification.—Numerous reports have appeared in the daily and technical press recently that the electrification of the Central Railway of Brazil is to be completed by American interests. The Metropolitan-Vickers Electrical Co. Ltd. authorises us to state that such reports are entirely incorrect. The first stage of conversion carried out by Metro-Vick has been operating successfully for over a year; there is no reason to expect that the second stage will not be carried out by Metro-Vick in accordance with the original proposals.

Contracts and Tenders

The Metropolitan-Cammell Carriage & Wagon Co. Ltd. has received orders from the L.N.E.R. for 250 plate wagons of 20 tons capacity and a score of 25-ton hopper ballast wagons.

The Gloucester Railway Carriage & Wagon Co. Ltd. has received an order from the Crown Agents for the Colonies for 16 goods brake van bodies for the Nigerian Railway.

The English Electric Co. Ltd. has received an order from the Central S.M.T. Co. Ltd. for 10 double-deck low-bridge 53-seat bus bodies of all-metal riveted construction.

The Associated Equipment Co. Ltd. has received the following orders:—

Western Welsh Omnibus Co. Ltd.: 15 Regent oil-engined double-deckers.

Ribble Motor Services Limited: One Regal bus.

Halifax Corporation: One Regent bus.

Samuel Fox & Co. Ltd. has received an order for 50 locomotive tyres from the Egyptian State Railways.

The loan estimates of the New South Wales Government for the year 1940 include the sum of £1,362,000 for railway rolling stock.

The Queensland Government Railways have been recommended in a report by Mr. W. A. Hooper, a Royal Commissioner, to instal modern machinery in the railway workshops, and do away with much obsolete plant.

Caprotti Valve Gears Limited has received an order from the Bengal & North Western Railway for three sets of Caprotti valve gear for YB class metre-gauge locomotives.

The Bengal-Nagpur Railway has placed the following orders:—

Taylor Bros. & Co. Ltd.: 1,100 carriage and wagon tyres.

John Baker & Bessemer Limited: 1,100 carriage and wagon tyres.

Steel, Peech & Tozer: 1,000 carriage and wagon tyres.

Thos. Firth & John Brown Limited: 1,000 carriage and wagon tyres; 250 carriage and wagon axles.

Metropolitan-Cammell Carriage & Wagon Co. Ltd.: 24 buffers.

R. Y. Pickering & Co. Ltd.: 50 tyred disc wheels.

The following orders have been placed to the inspection of Messrs. Rendel, Palmer & Tritton:—

Mysore State Railway: Metropolitan-Cammell Carriage & Wagon Co. Ltd.; 6 metre-gauge bogie low-sided wagons, 37 ft. long.

Bikaner State Railway: Craven's Railway Carriage & Wagon Co. Ltd.; 160 pairs of disc wheels and axles.

The Benguella Railway has placed the following orders:—

Monk Bridge Iron & Steel Co. Ltd.: 390 loco. tyres.

Steel, Peech & Tozer: 345 carriage and wagon tyres.

The Crown Agents for the Colonies have placed an order with Taylor Bros. & Co. Ltd. for 16 locomotive tyres for the Ceylon Government Railway.

The Nizam's State Railway has placed the following orders:—

Taylor Bros. & Co. Ltd.: 80 loco. tyres.

Wm. Beardmore & Co. Ltd.: 314 loco. tyres.

The last date for tenders for the 43 locomotive boilers required by the Eastern Bengal Railway (see this column in our issues of November 17 and December 22) has again been postponed, this time until February 12.

Tenders for the electrification of the Sorocabana Railway between San Paulo and São Antonio, 87 miles, are to be in by February 16. The system is to be 3,000-volt d.c.

Forthcoming Meetings

January 30 (Tues.)—Bengal & North Western Railway Co. Ltd. (Ordinary General), Winchester House, Old Broad Street, E.C., at noon.

Railway Share Market

The decision to replace the £352,000,000 of 4½ per cent. Conversion Loan (1940-44) by a 2 per cent. Conversion Loan (1943-45) has been followed by further appreciation in British Government securities. Home Railway debenture stocks have risen strongly in price, the yields being regarded as attractive bearing in mind existing trends in front rank investment securities. Junior stocks of the main-line companies also appreciated, in response to renewed market hopes that an announcement may shortly be made of satisfactory financial arrangements between the Government and the railways, but in all cases best prices touched during the past few days were not fully held; a certain amount of profit-taking was in evidence. It is perhaps only reasonable to expect that the junior stocks will fluctuate pending official news as to the Government's intentions, and the tendency in the debentures is dependent on that in gilt-edged securities.

On balance Great Western ordinary has risen from 36 to 39½, while the 5 per cent. preference was 96½, compared with 89½ a week ago, and the 5 per cent. guaranteed stock moved up from 108 to 112½. At 103½ the 4 per cent. debentures

show a gain of 4 points. L.N.E.R. guaranteed stocks have moved ahead, the first being 78½ xd, compared with 74½ a week ago, and the second 70 xd, compared with 65. In the case of the first preference the price is now 42, as against 38 a week ago, and an improvement from 12½ to 14½ was shown in the second preference; the debentures attracted attention in view of the yields offered, the 4 per cents. having risen from 85½ to 90½ and the 3 per cents from 65 to 70½. The preferred stock was fractionally better in accordance with the general trend. Among Southern issues the preferred appreciated from 64½ to 68½, and the deferred from 12½ to 14. The preference stock was 97, and the guaranteed 112½, compared with 109½. The 4 per cent. debentures at 103½ show a rise of four points. L.M.S.R. ordinary, which was 13½ a week ago, has since risen to 14½. In the case of the 4 per cent. guaranteed the current price of 90 represents a gain of as much as six points on the week. A rise from 58½ to 63 was recorded in the 4 per cent. senior preference, while a gain from 42½ to 46½ was shown in the 4 per cent. 1923 preference. The 4 per cent. debentures were 92½, in com-

parison with 93½, and the 5 per cent. debentures 107, compared with 105, London Transport "C" stock, reference to which was made last week, remained pegged at 65, but higher prices ruled for the "A" and "B" stocks; the 5 per cent. "B" moved up sharply to 110½.

Foreign railway securities were inclined to improve in accordance with the prevailing tendency on the Stock Exchange, but little demand was reported. Debenture stocks of the Argentine companies seem to be firmly held, and in some cases would appear to be relatively undervalued. B.A. Gt. Southern 4 per cent. debentures made the slightly better price of 57½, B.A. Western 4 per cent. debentures improved to 52½, and Central Argentine debentures were also moderately better, the tendency being for prices to respond readily to only small demand. Little attention was given to stocks of the preference and ordinary class. There was some buying of Grand Trunk and Canadian Pacific debentures, which have responded in price. C.P.R. shares were easier, as was the preference stock, although the market remains hopeful that a small distribution on the latter may be announced next month.

Traffic Table of Overseas and Foreign Railways Publishing Weekly Returns

Railways	Miles open 1939-40	Week Ending	Traffic for Week		No. of Weeks	Aggregate Traffic to Date			Shares or Stock	Prices						
			Total this year	Inc. or Dec. compared with 1938		Totals		Increase or Decrease		Highest 1939	Lowest 1939	Jan. 23, 1940	Yield % (Note)			
						This Year	Last Year									
South & Central America	Antofagasta (Chili) & Bolivia	834	14.1.40	£ 18,910	+	£ 8,820	2	£ 34,950	£ 22,920	+	£ 12,030	Ord. Stk.	105½	41½	91½	Nil
	Argentine North Eastern	753	13.1.40	ps 129,400	—	10,300	29	ps 4,525,500	ps 4,678,100	—	ps 152,600	"	41½	2	21½	Nil
	Bolivar	174	Dec. 1939	4,001	+	1,951	52	51,531	42,150	+	9,381	6 p.c. Deb.	71½	55½	7	Nil
	Brazil	2,801	13.1.40	ps 1,340,000	—	ps 211,000	29	ps 34,713,000	ps 35,211,000	—	ps 498,000	Bonds	55½	41½	6	88½
	Buenos Ayres & Pacific	190	2.12.39	\$90,800	—	\$14,600	23	\$2,488,000	\$2,677,100	—	\$189,100	Ord. Stk.	8½	2	31½	Nil
	Buenos Aires Central	5,082	13.1.40	ps 2,904,000	+	ps 96,000	29	ps 59,182,000	ps 59,756,000	—	ps 574,000	Mt. Deb.	14	8	12½	Nil
	Buenos Aires Gt. Southern	1,930	13.1.40	ps 912,000	+	ps 56,000	29	ps 20,848,000	ps 19,290,000	+	ps 1,558,000	Ord. Stk.	135½	41½	8	Nil
	Buenos Ayres Western	3,700	13.1.40	ps 1,499,950	—	ps 675,550	29	ps 50,998,390	ps 49,990,700	+	ps 1,007,600	"	101½	4	61½	Nil
	Cent. Argentine	972	13.1.40	26,931	+	9,939	29	546,489	517,633	+	28,856	"	114½	4	7	Nil
	Do.	188	June 1939	25,240	—	6,120	52	270,756	314,399	—	43,643	Did.	4	1½	2	Nil
	Cent. Uruguay of M. Video	70	Dec. 1939	14,100	—	1,100	52	164,500	193,300	—	28,800	Ord. Stk.	24½	7½	2	Nil
	Costa Rica	810	13.1.40	ps 231,400	—	ps 72,100	29	ps 7,025,100	ps 7,307,800	—	ps 282,700	Ord. Stk.	21½	18	22	91½
	Dorada	1,016	13.1.40	13,600	+	800	2	23,600	24,000	—	400	1 Mt. Db.	104½	102	102½	57½
	Entre Rios	794	Nov. 1939	\$511,348	+	\$10,912	48	\$5,448,489	\$5,081,216	+	\$367,273	Ord. Sh.	6	3	4	Nil
	Great Western of Brazil	22½	Dec. 1939	7,185	+	6,385	52	74,961	57,905	+	17,056	Ord. Sh.	3½	1/2½	1½	Nil
	International of Cl. Amer.	1,918	13.1.40	21,586	—	3,402	2	41,247	44,942	—	3,695	1st Pref.	71½d.	71½d.	71½	Nil
	Inter-oceanic of Mexico	483	21.12.39	301,100	—	\$37,200	24	\$6,711,900	\$6,627,400	+	\$84,500	Stk.	7	6½	7½	Nil
	La Guaira & Caracas	319	Dec. 1939	10,240	—	408	26	54,960	54,555	—	405	Ord. Stk.	2½	12	2	Nil
	Leopoldina	386	15.1.40	9,925	+	6,106	2	9,925	3,819	—	6,106	"	15½	14	1½	Nil
	Midland of Uruguay	274	13.1.40	\$3,176,000	+	\$416,000	29	\$91,308,000	\$88,176,000	+	\$3,132,000	2½	14	17	Nil	
Nitrate	1,059	Dec. 1939	67,441	—	1,339	28	383,935	409,453	—	25,518	Ord. Sh.	21½	11½	17½	61½	
Paraguay Central	100	23.12.39	\$22,580	—	\$11,420	25	\$296,854	\$368,214	—	\$71,360	45½	36	38	15½		
Peruvian Corporation	153½	7.1.40	26,437	—	235	1	26,437	26,672	—	235	Pref.	191½	16	15	Nil	
Salvador	160	Nov. 1939	2,755	+	1,025	22	10,540	13,515	—	2,975	Pr. Li. Db.	191½	16	15	Nil	
San Paulo	1,353	13.1.40	17,232	—	1,321	29	478,311	452,619	+	25,692	Ord. Stk.	58	6½	58	8	
Taital	73	Dec. 1939	1,432	—	185	26	6,222	6,478	—	256	Ord. Sh.	2	14	1	Nil	
United of Havana	—	—	—	—	—	—	—	—	—	—	Deb. Stk.	2	2	2	Nil	
Uruguay Northern	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Canada	Canadian National	23,691	14.1.40	748,236	+	125,236	2	1,472,269	1,184,452	+	287,817	"	74½	60	74	57½
	Canadian Northern	—	—	—	—	—	—	—	—	—	4 p.c.	100½	76	99	4	
	Grand Trunk	—	—	—	—	—	—	—	—	—	Ord. Gar.	75½	3½	7	Nil	
Canadian Pacific	17,171	14.1.40	\$27,400	+	102,200	2	1,014,200	880,400	+	163,800	"	75½	3½	7	Nil	
India & Far East	Assam Bengal	1,329	20.11.39	47,310	+	535	32	978,293	938,741	+	39,552	Ord. Stk.	761½	60	741½	4
	Barsi Light	202	31.12.39	4,515	+	338	39	96,952	106,200	—	9,248	Ord. Sh.	561½	50½	45	87½
	Bengal & North Western	2,096	31.12.39	85,050	—	6,258	13	648,460	703,002	—	54,542	Ord. Stk.	277	229½	245	61½
	Bengal Doonars & Extension	161	20.12.39	4,262	+	162	38	105,004	112,005	—	7,001	"	91	84½	85	75½
	Bengal-Nagpur	3,267	31.12.39	251,850	+	25,086	39	5,830,521	5,173,541	+	656,980	"	943½	83½	86½	43½
	Bombay, Baroda & Cl. India	2,986	10.1.40	264,675	—	600	41	6,888,125	6,766,650	+	120,975	"	108	90	102½	57½
	Madras & Southern Mahratta	2,967	31.12.39	214,200	+	12,196	39	4,274,837	4,156,969	+	117,868	"	1041½	92	101½	73½
	Rohilkund & Kumaon	571	31.12.39	19,933	+	1,897	13	133,193	127,599	+	5,594	"	280	263	243	69½
	South Indian	2,531½	20.12.39	120,018	+	10,867	38	2,946,571	2,966,287	—	19,716	"	102½	88	89½	59½
	Beira	204	Oct. 1939	71,976	—	—	4	71,976	—	—	—	—	—	—	—	—
Various	Egyptian Delta	623	20.12.39	7,106	—	285	38	155,708	155,180	—	528	Prf. Sh.	1½	14	5½	Nil
	Kenya & Uganda	1,625	May 1939	206,557	—	11,205	21	1,220,870	1,309,332	—	88,462	"	—	—	—	—
	Manila	—	—	—	—	—	—	—	—	—	B. Deb.	55	39	47½	73½	
	Midland of W. Australia	277	Oct. 1939	15,188	—	1,982	17	51,806	61,856	—	10,050	Inc. Deb.	91½	87½	88	49½
	Nigerian	1,900	11.11.39	38,224	—	3,615	33	942,555	998,459	—	55,904	"	—	—	—	—
	Rhodesia	2,442½	Oct. 1939	388,154	—	4	4	388,154	—	—	—	—	—	—	—	—
	South Africa	3,284	23.12.39	698,435	+	40,523	42	24,943,114	23,903,530	+	1,039,584	"	—	—	—	—
	Victoria	4,774	Oct. 1939	871,621	+	43,492	17	3,049,244	3,064,925	—	15,681	"	—	—	—	—

NOTE. Yields are based on the approximate current prices and are within a fraction of 1½ Argentine traffic are now given in pesos.

† Receipts are calculated @ 1s. 6d. to the rupee.

§ ex dividend